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Textile World

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SPUN·LO

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Chemical Engineers: and Textiles

THE engineer and the chemist have made—and re-made—the textile industry. But what about the modern hybrid: the chemical engineer?

Data developed by the American Institute of Chemical Engineers reveal that the industry barely knows of the existence of this profession. Of 674 chemical engineering graduates of the 10 classes 1920-29 inclusive, who replied to a questionnaire, 475 were in industry but only three in textile manufacture. Below it, in number employed, were only the fertilizer industry and the leather industry.

And yet, the textile industry consumes annually chemicals and dyestuffs valued at over $100,000,000. It is faced with chemical engineering problems of the most diverse kinds. It offers unlimited opportunities for rationalization of processes, inviting the skill and vision of the chemical engineering profession.

▼

Those who are constitutionally opposed to any new development have criticized the chemical engineer as "neither fish nor fowl." He is not a chemist, they maintain, nor is he an engineer. In our opinion, that is just why he is needed in the textile industry.

There can be—or should be—no line of demarcation between the engineering problems and the chemical problems involved in textile processing. In fact, attempts to draw that line have been responsible for the relatively unimportant part which a chemist too often plays in mill operation; and for the fact that his department is apt to be regarded as merely a routine testing laboratory, a sort of necessary evil.

Such attempts also have contributed to the use of the trial-and-error method by which so much of our processing technique has been developed. The chemist, handicapped by lack of engineering knowledge, and consequently by lack of respect among department heads, has found it difficult, if not impossible, to translate laboratory findings into plant practice.

▼

The most successful textile mill chemists we know are men who, by training or inclination, are also engineers. They may not possess degrees in chemical engineering but they are performing the function which that profession involves.

This type of man is needed in the textile mill. He is needed not only to direct the chemical laboratory but, in the case of a finishing plant, to coordinate and direct the operations of the entire plant. That function, we have found, is performed by those chemists who have come to be something more than merely analysts or trouble-shooters.

For the good of the industry, it is to be hoped that statistics on employment of chemical engineering graduates of the present decade will tell a different story.

The Week in Textiles

as Reflected in This Issue

General

1931 Insolvencies Set Record
Textile insolvencies in 1931 totalled 1,037 companies, involving indebtedness of $50,939,000, according to results of survey just completed by the National Credit Office. *(page 24)*

A Stabilization Proposal
Suggestion for the stabilization of a market by regulating output of machines for making the product is contained in a statement by H. W. Anderson, president and general manager, Fidelity Machine Co., Philadelphia. The principle seems particularly applicable to the hosiery industry where patents limit the control of machines to one or at most few companies. *(page 33)*

Cross Drawing for 1x1 Selvage
A method by which two harnesses can be operated successfully by one dobby lever reduces the number of levers required in weaving a pattern and permits the weaving of a one-and-one selvage. *(page 41)*

Cotton

Hooked-Rug Foundations
Revival of interest in the home manufacture of hooked rugs has stimulated a demand for a suitable cotton fabric to use as a foundation. The low price of cotton has made competition with burlap feasible; and careful research indicates that, at slight additional cost, a cotton fabric for this purpose can be made which will have very desirable properties. *(page 16)*

Traveler Speed
The factors which govern the speed limitations of the cotton traveler are discussed, and it is pointed out that the size of the ring is a very important factor in this respect. The difficulty of adapting European practice to mills in this country is explained, and the author predicts that spinning frame changes will take the form of refinements rather than alteration in principle. *(page 28)*

Better Metals and Increased Speeds
Metallurgical progress as it affects textile machinery and the selection of suitable spindle speeds are the topics discussed. The more prevalent use of steel in place of cast iron is pointed out as an important forward step. *(page 26)*

Cotton Moves Up
Raw cotton market felt the bouyancy which sprang up in the stock market late last week, and, after a period of wavering prices, has recorded small advances. There is scant pressure on either side of the market and traders do not expect much change until acreage figures are more definite and consuming rate better established. *(page 47)*

Yarn Sentiment Improves
Cotton yarn sellers report better conditions this week in their field yet there is little tangible gain in business. Improvement in other branches gives a sentimental boost to yarns, but buyers are loath to pay asked prices. Spinners are hopeful that actual improvement will not be long delayed. *(page 47)*

Cottons Again Optimistic
Cotton goods statistics for January which show large sales, big increase in unfilled orders at end of month and a decrease in stocks are regarded optimistically. They show what a sharp change of front can be made in one month's time and show the basis for strengthened prices. *(page 49)*

Wool

1932 Wool Week Up to Industry
Plans for a trade-wide meeting in New York March 1, of leading wool industry executives to decide extent of joint action in proposed 1932 Wool Week, were formed by National Wool Week Committee at session in New York Tuesday. *(page 19)*

American Woolen Report
The annual report of the American Woolen Co. indicates progress. Inactive plants have been turned over to a subsidiary company for liquidation and their charges consequently cease to be a burden on the actual operations of the company. The expedient of changing to no par value the existing common stock of the company is suggested to make up capital deficit. *(page 20)*

Seasonable Fabrics
Several fabrics which appear to offer a substantial bid for popularity are discribed and illustrated. The peculiarities of construction and variations of finish of these fabrics are carefully discussed, and it is pointed out that slight alterations will often make a men's wear fabric into a very suitable one for women's dress goods. *(page 22)*

Unevenness in Mock-Twist Yarn
Revision of the drawing layout is offered as the solution to the problem of securing good even yarn of the mock-twist type. Even roving is the secret of success in this line. *(page 40)*

The Textile Outlook

WHETHER the stock market is only a symptom or the real germ of the disease may be argued fruitlessly, but it is certainly true that general business feels better when stocks are moving upward. The recent upturn in Wall Street as a matter of fact followed a successful January in the cotton goods market and it is proving serviceable to maintain an optimistic tone at a time when there might be a let-down. The anti-hoarding campaign is said to be making some headway and if appreciable quantities of currency can be pried loose their activity as a basis for credit will surely be felt. Statistics on retail sales are not available for a recent enough period to reflect change but it is believed that sales within the last few weeks have been better supported that those in the last quarter of 1931. Wool goods are more active though at low prices. Silks have improved due to mill curtailment but the garment strike in New York casts a shadow on the immediate future. The hosiery market is called healthy. Sharp reductions on new season underwear bring only a scant initial business. Fair call is reported for bathing suits and women's sweaters are active.

Mule-Spun Yarn Uneven

Several possible causes for the production of uneven woolen yarn are outlined, and remedial measures are suggested. The card is pointed out as the most likely source of trouble of this nature. *(page 40)*

Quality Should Be Sales Point

Further emphasis on quality in wool goods may prove the way out, says this week's TEXTILE WORLD Analyst. Style and quality is recommended as the dominant note for the new season. The depression has brought a wave of inferior goods and quality goods would help strengthen prices. *(page 43)*

Yarns Still Dull

Worsted yarns remain in the same lethargic state which has characterized them for some time. Although a fair future seems to be ahead, users are so cautious that they are avoiding commitments beyond immediate needs. There is repeated reference to raw wool strength as an element that should give buyer confidence. *(page 47)*

Wools Remain Steady

Wools are quiet and prices continue firm. Although week-to-week reports have not disclosed much activity dealers say that January as a whole was a good month and that a large poundage of wool was moved. The present is a time when dealers often let the market slip so that they may buy new clip wools more favorably. *(page 48)*

Suiting Prices Weaker

Weakening of prices of men's suitings prompts some mills to accept orders on contracts giving customers advantage of cut expected on new fall lines. *(page 49)*

Knitting

Non-Run Hosiery

The commercial exploitation of a method of knitting whereby hosiery will be rendered run-proof is a possibility of the near future. A description of the essential features of the patent upon which the method is based is offered, together with a diagrammatical sketch of the resulting fabric. *(page 21)*

Arranging Program

Program is now being arranged for the annual meeting of the National Association of Hosiery and Underwear Manufacturers in Philadelphia on April 14. *(page 32)*

Style Sells Half-Hose

In a generally poor half-hose market, distinctively styled lines enjoy good demand at firm prices. *(page 50)*

Fall Underwear Lines Open

Mild interest greeted the mills showing new fall underwear merchandise this week; prices are 8 to 12½% below last season. *(page 50)*

Swimsuit Reorders To Be Late

With signs indicating a late duplicate business in swimsuits, mills are advised to use extreme caution in building up stocks. *(page 50)*

Stabilization Plan Supported by 90% of Mills

GEORGE WALCOTT, chairman of the print cloth selling agents committee, stated in New York on Thursday that over 90% of the print cloth mills have announced to their respective selling agents that they will conform to the recommendation looking to the avoidance of overproduction and to better stabilization of employment. This step is the outcome of a meeting of selling agents and mill executives held in Spartanburg, S. C., on Jan. 29. Earlier in the year a committee of converters conferred with several leading southern manufacturers strongly to urge a better balance of production with demand.

The Spartanburg recommendation of Jan. 29 provides that production during the present emergency should not exceed a rate of 90% or 50 hours per week for day-running mills; a rate of 80% for mills running on a 55-hour day and 50-hour night schedule per week; and a rate of 75% for mills running in excess of 105 hours per week. The recommendation includes mills on twills, pajama checks and carded broadcloth of approximately print cloth yarn numbers.

The Business Outlook

NEW emergency banking legislation has stimulated speculative activity in security and commodity markets by arousing renewed expectation of a final check to deflationary forces, but business activity has so far shown no sign of response. Most current indicators moved to lower levels by the middle of February. Building contracts have practically dried up with the disappearance of public construction. Electric power output is depressed by unseasonal weather. Carloadings continue slack except for sporadic spurts of coal shipments. Steel production still awaits acceleration from automobile demand expected to be released, now that Ford plans are revealed. Foreign trade has relapsed to pre-war levels, and prospects for progress in international cooperation on reparations and peace problems are not improved. Domestic currency hoarding and bank credit contraction have so far shown no marked change in response to Administration efforts, but immediate obstacles to aggressive Federal Reserve open market operations and credit expansion will be removed by the banking measures being rushed through Congress.—*The Business Week.*

Silk

Warp Streaks in Crepe de Chine

Mixing of lots of silk in winding or warping and cramming of dents in weaving are determined as the causes of warp streaks appearing on crepe de chine fabric. *(page 41)*

Cheney Plan Explained

Explaining the scope and aims underlying the production and sales plan initiated recently by Cheney Brothers, Kent Mitchell, merchandise manager, asks N.R.D.G.A. piece goods buyers to cooperate. *(page 25)*

Raw Silk Prices Firmer

Despite poor buying by broadsilk mills, raw silk prices tended upward this week; scarcity of 20/22s brought a 10c. advance. *(page 48)*

Spun Yarn 60s Reduced

A cut of 10c. in imported spun yarns forced domestic spinners to parallel the new levels; demand is light. *(page 48)*

Strike Worries Weavers

A dress strike in New York is causing broadsilk weavers some concern. Demand has been good, with fair interest in cantons, shantungs and chiffons. *(page 49)*

Rayon

Knitting Yarn Sales Rise

Sales of rayon yarns to knitters increased this week, and movement of weaving yarns held steady, strengthening market position. *(page 48)*

Processing

Holes in Dyed Hosiery

Rust deterioration or the effects of a floor- or window-cleaning compound are blamed for the development of holes in various portions of silk hose. Overcoming carelessness is the only cure for this. *(page 41)*

Cotton Fabrics Suitable for Hooked-Rug Foundations

By Ellen K. Beavens and John T. Wiginton†*

WIDESPREAD interest in home furnishings reminiscent of the Colonial days has revived the art of making hooked rugs. It is a handicraft that supplies necessary floor coverings at little expense. It gives the homemaker an opportunity for individuality in her own furnishings, and it offers others a means of livelihood, which in some sections of the country has become an established home industry.

Materials used in making hooked rugs are the foundation on which the design is stamped, the filler or material hooked into the foundation, and the lining. Originally, any loosely woven cloth, such as coarse canvas, gunny sacking, or linsey-woolsey, was used for the base of these rugs. More recently, burlap has been used almost exclusively, approximately 500,000 yd. being consumed annually in stamped patterns. In addition to this, upholsterer's and bagging burlap are being used.

Coincident with the low price of cotton and the effort to increase its use, there has come an appeal from housewives in the southern States for a suitable cotton fabric for hooked-rug foundations. This appeal was prompted by a desire to use the home product, and by the need for a more serviceable fabric for this purpose, since up to this time the burlaps available have not in all cases proved satisfactory. Rugs that required hours of labor in the making have, in some instances, developed breaks in the foundation after being used for a short period of time. It was believed that if a suitable cotton fabric could be developed it would meet this need and establish another use for short-staple cotton. Furthermore, the present market price of raw cotton makes it possible to manufacture fabrics which may be used for rug foundations at a cost only slightly greater than that of burlap.

A survey of the markets revealed that one large company is using cotton exclusively for the foundation material on which to stamp their hooked-rug patterns (Fig. 1). This fabric is made of ply yarn and is very strong, but is considerably higher in price than burlap, both in the piece and when imprinted with the design. Another cotton foundation (Fig. 2) is used for cross-stitch rugs, but has several good features for some types of hooking. The yarns are sized heavily to make them smooth; they are grouped so that spaces can be counted off easily; and the fabrics has enough body to work well in the frame. However, the construction of this fabric makes its price higher than that of other materials.

*Formerly on the staff of the Bureau of Home Economics, U. S. Department of Agriculture.

†Cotton Technologist, Division of Cotton Marketing, Bureau of Agricultural Economics, U. S. Department of Agriculture.

The experimental fabrics were manufactured in the laboratory of the Textile School, of the North Carolina State College of Agriculture and Engineering, where research in fabric designing and processing is being cooperatively conducted by that institution and the Bureau of Agricultural Economics, U. S. Department of Agriculture. Acknowledgment is made to J. J. Brown for his services in weaving the experimental fabrics and to C. S. Tatum, manager, Pilot Mills, for his cooperation in finishing them.

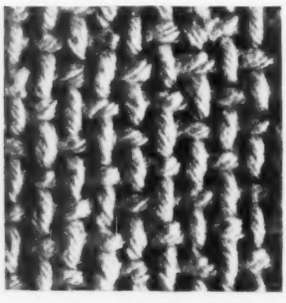


Fig. 1. Ply-yarn commercial rug foundation

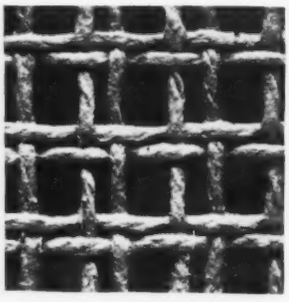


Fig. 2. Cross-stitch rug canvas

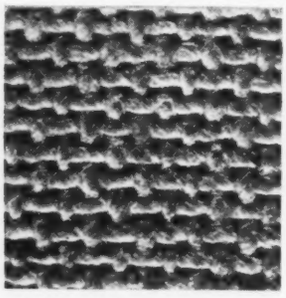


Fig. 3. Experimental fabric—Sample 1B

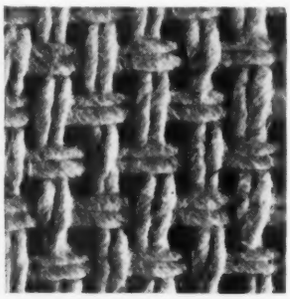


Fig. 4. Experimental fabric—Sample 2B

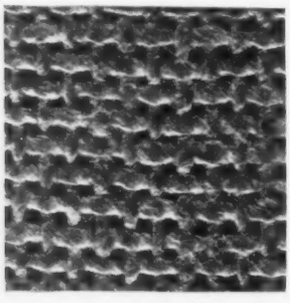


Fig. 5. Experimental fabric—Sample 1C

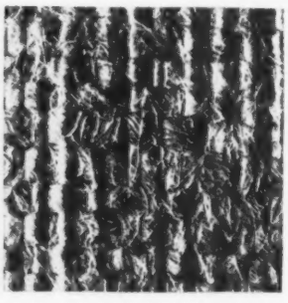


Fig. 6. Art burlap commercial rug foundation

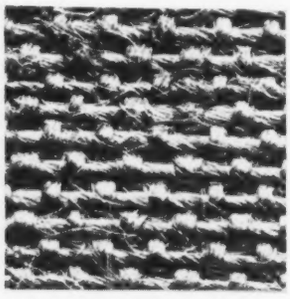


Fig. 7. Upholsterers' burlap

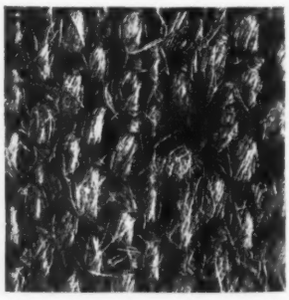
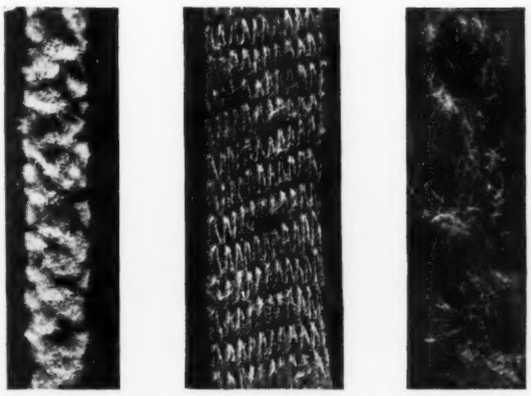


Fig. 8. Bagging burlap

In response to these requests, the Bureau of Agricultural Economics and the Bureau of Home Economics, of the U. S. Department of Agriculture, began a study of the materials used in the construction of these rugs, and of the possibilities for developing a durable, inexpensive cotton fabric which would be a suitable foundation for all types of fillers used in this work. After a careful analysis had been made of the types of burlap used, seven experimental fabrics were designed using the two cotton materials shown in Figs. 1 and 2 as a basis. These experimental fabrics were tried out in the laboratory with various fillers to determine which patterns were best under actual working conditions.

From the seven, two were selected as desirable, Sample 1B (Fig. 3) and Sample 2B (Fig. 4). The materials were manufactured from Good Ordinary Cotton, $\frac{7}{8}$ in. staple length, and were spun into 1.5s roving yarn. The

Fig. 10. Chair pad of cotton chenille made on a cotton foundation and lined with osnaburg



a *b* *c*

Fig. 9. Cotton fillers—a, chenille; b, knitted tubular filler; c, three-ply roving yarn

cotton was passed through two processes of picking, cards, one process of drawing, and two processes of roving.

The specifications for these two patterns are as shown in Table 1 (page 18).

These two patterns are identical in width and yarn count, but differ in cloth count; 1B is a plain weave, and 2B has two yarns grouped together to form a basket weave. Both fabrics have been sized lightly and then calendered to hold the fuzzy ends close to the yarn and to give a smooth surface, thus facilitating their use.

A comparative analysis was made of the experimental fabrics and three burlap fabrics commonly used. Thread count, weight per square yard, tensile strength, and thickness were determined. Table I gives the results of this analysis. Each sample was allowed to condition four hours at a relative humidity of 65% and a temperature of 70° F. The strip method was used for the tensile-strength tests. Fifteen warp-wise, and fifteen filling-wise specimens were cut in groups of five from both sides and the center of each fabric. The strips were broken on a Scott tester with the lower or pulling jaw moving at a uniform rate of 12 in. per min. The samples were also measured on a micrometer thickness gage, having a foot approximately $\frac{1}{8}$ in. in diameter. All specimens were taken at least 6 in. in from the selvage.

A study of the table shows that cotton Sample 1B is almost identical in construction with the art burlap (Fig. 6), which is the grade used in many high-quality commercial rug patterns. The thread count, weight per square yard, and thickness are practically the same. In the matter of tensile strength the two materials differ considerably. The cotton warp shows a strength of 126.4 as compared with 85.6 in the burlap; but the burlap filling is stronger than the cotton filling. These figures indicate that the burlap is unevenly balanced; and it seems logical, therefore, to assume that the warp yarns would break much sooner than the filling. Moreover, the jute fiber in burlap is known to deteriorate rapidly when exposed to moisture or sunlight, and under ordinary conditions of wear to become brittle and lose much of its strength; whereas cotton fabrics offer greater resistance to moisture and sunlight. Furthermore, the cotton fabric is equally strong, both warp-wise and filling-wise, and is recommended as a suitable foundation for rug work.

In addition to these tests, complete rugs were con-

Fig. 11. Rug of cotton filler closely resembles the old-time hooked rug made of rags

structed in the laboratory, using various types of hooking fillers on these experimental foundations. Sample 1B proved to be the most satisfactory. It was found that this material took a design readily, remained taut in the frame during the hooking process, would carry practically any filler that could be used on burlap, and was easy to work on because the yarns slip apart to admit the needle and then spring back to hold the loops.

As stated before, available cotton fabrics suitable for hooked rug foundations are somewhat prohibitive in price. However, with the present price of cotton, it is estimated that experimental fabric 1B can be manufactured and marketed for approximately 10c. per yard; whereas, the art burlap is quoted at 9.5c. per yard. In view of the superior strength and durability of the cotton fabric as compared with the burlap fabrics commonly used, this slight difference in cost is unimportant.

Colonial rug makers were somewhat limited in their choice of fillers, but there is a wide variety from which the modern worker can make her selection. Many hooked rugs are still made, as they were years ago, from bits of discarded clothing cut into narrow strips, and then caught into the foundation material. New cloth can be purchased in the desired color, or mill ends and hosiery waste may be bought at small cost and dyed as required. When price is not a consideration, the prepared wool yarns are durable and easy to use. Rayon fillers are also attractive. In addition, there are a number of inexpensive cotton fillers which come in a variety of desirable soft colors.

Cotton chenille (Fig. 9*a*) was used on a cotton foundation for the chair pad shown in Fig. 10. This filler gives a rich, velvety appearance to the finished article. While it is not recommended for rugs which will be exposed to hard wear, it is very satisfactory for chair pads, mats, and bedroom and bathroom rugs. Another kind of filler is knitted in a flat tubular form (Fig. 9*b*) and approximates the strips of cloth. It has an interesting texture, and rugs made from it closely resemble those of Colonial times. Fig. 11 shows a bedroom rug made of it. A third type of cotton filler is in reality a three-ply roving yarn (Fig. 9*c*). Although the separate strands are rather weak, the yarn itself is strong. While it may not be so durable as some of the wool yarns, it makes attractive, inexpensive rugs for the bedroom or bathroom.

As a rule, cotton fillers should not be clipped, as are many of the wool types. Their attractiveness lies in the interesting texture of the filler, the soft colors, and the low cost.

A lining gives added life to an old rug and saves much wear on a new one. It prevents the rug from curling readily, gives it body, and keeps dust and grit from cutting the stitches on the back of the rug. Any durable, closely woven cotton, such as crash, denim, osnaburg, or canvas, is satisfactory. The chair pad shown in Fig. 10 is lined with osnaburg.

Table I. Comparison of construction, weight, tensile strength, and thickness of burlap and cotton fabrics for hooked-rug foundations

Fabric	Weave	Fabric Count per Inch Warp	Fabric Count per Inch Filling	Weight per Sq.Yd.	Tensile Strength per Inch (1) Warp	Tensile Strength per Inch (1) Filling	Thickness
		Number		*Ounces*	*Pounds*		*Inches*
Burlap							
Art	Plain	12	12	11.5	85.6	176.2	.026
Upholsterer's	Plain	13	13	6.4	105	97.5	.031
Bagging	Plain	12	12	6.7	69.0	56.8	.036
Cotton							
Sample 1B	Plain	12	13	11.5	126.4	122	.026
Sample 1C	Plain	14	14	13.1	137	133	.035
Sample 2B	Basket	14	15	13.3	138.2	131	.036

(1) Strip Method.

Sample 1B (Plain weave)	
Width	40 in.
Ends	12.0
Picks	12.0
Warp count	1.5
Filling count	1.5
Weight—(oz. per yd.)	13.6
Sized and calendered	

Sample 2B (Basket weave)	
Width	40 in.
Ends	14.0
Picks	14.0
Warp count	1.5
Filling count	1.5
Weight—(oz. per yd.)	15.8
Sized and calendered	

1932 Wool Week

Theme of Trade-Wide Meeting Called for March 1

IT IS up to the wool industry itself to determine whether the promotional impetus gained through National Wool Week, last fall, will be used in a still more effective campaign this year. Such was the decision of the National Wool Week Committee, at a meeting Tuesday morning at 51 Madison Ave., New York. Following much discussion on the issue of getting trade-wide cooperation, it was decided to invite official representatives of the National Wool Growers' Association, and all the other bodies cooperating in the previous event, to attend a meeting at the same place on March 1.

Col. Chas. F. H. Johnson, chairman of National Wool Week Committee, was instructed by a vote of those present to write these organizations, asking them to send spokesmen to the meeting, with the aim of deciding whether and to what extent they would support a National Wool Week observance this year.

Col. Johnson, who presided at the Tuesday meeting, reported enthusiastically on the results of the 1931 promotional drive. The figures he quoted were impressive. More than 125,000 lines of newspaper advertising were inserted by retailers on behalf of the event; 750 newspapers and magazines carried Wool Week stories totaling above 300,000 lines; many newspapers issued elaborate Wool Week sections.

Included in the promotional material distributed nationally by the Wool Week Committee were the following: 16,000 posters; 8,500 eight-page newspaper-size "promotion books"; 14,000 booklets containing "Facts on Wool"; 11,000 color cards containing the two Wool Week hues; 8,000 leaflets setting forth "Things to Know About National Wool Week"; 225,000 stickers for use on mail and other stationery; 4,300 matrices for use in newspaper advertisements; 2,500 sheets containing special window display ideas; 10,000 circulars to federal, state and county agricultural agents outlining methods of cooperation with local merchants and consumers in behalf of National Wool Week; 59,000 letters and questionnaires on various aspects of Wool Week were sent out to retailers, cutters-up and other manufacturers of woolen products, chambers of commerce, trade associations and others.

As regards the success of Wool Week, last fall, the meeting was sold from the start; with respect to support of the event this year, however, the committee members felt skeptical. The readiness of many wool goods mills to enjoy the benefits of the drive, without contributing thereto, in time or money, provoked some acid comments. The picture was brightened by an address of Theo. B. Hayward, Philadelphia representative of Swift & Co., who reported that the Boston wool industry was keenly awake to the benefits of Wool Week and eager to join such an event this year. Mr. Hayward said that such rebuffs as he encountered in Boston were greatly outnumbered by the enthusiastic comments he heard. He spoke before several leading wool groups in The Hub City, and his talks inspired some wool factors to write letters commending them to Col. Johnson.

The meeting was agreed that failure to continue Wool Week this year would mean losing the keen interest which last year's event stirred up among all groups, especially retailers and consumers.

Stressing the need for further promotion, Mr. Hayward read a letter he had written to Harry Blake, of the Boston wool trade, in which he quoted the editorial, "A New Deal in Rayon?" from the Feb. 16 issue of TEXTILE WORLD. He said that rayon was growing as a competitor of wool and urged the wool industry to offset this trend by cooperative work, during year now opening.

The surroundings in which the Wool Week Committee met were stimulating in themselves; the walls of the room were covered from top to bottom with thousands of newspaper clippings and advertisements, representing part of the 1931 Wool Week publicity. It was estimated that Sears, Roebuck & Co., retailers, alone spent more on Wool Week advertising than the cost of the campaign to the wool industry.

Among those at the meeting were: Thurmond Chatham, Chatham Mfg. Co.; F. E. Fitzpatrick, National Wool Marketing Corp.; Col. Holmes, Woolen Corp., of America; Isaac Solomon, wool dealer; Frank Levering, Eavenson & Levering Co.; W. E. Tracy, Jamestown Worsted Mills; F. R. Nixon, Worumbo Mfg. Co., and Bertram Reinitz.

Two models shown at style show in New York during Wool Week

American Woolen Co.

Reduces Loss— and Cleans House

◆ *What has the new management of the American Woolen Co. been doing? This question has been asked in all quarters of the textile industry during the last year. The answer, which was forthcoming in the annual report of the company for the year ending Dec. 31, 1931, made public this week, was hailed as a satisfactory one. Not only did the company net a loss 40% less than that of 1930, but, more important still, it put into effect systematic and scientific plans for "house cleaning" involving the entire revamping of its physical and financial structure. The whole process has been a demonstration of the type of wholesome "shrinkage" emphasized editorially in the Annual Review and Forecast Number of* TEXTILE WORLD.—Editor.

THE American Woolen Co. lost $2,836,826 during the year ending Dec. 31, 1931, as against a loss of $4,897,585 in 1930. At the end of 1931, the company had a book deficit of $17,738,679 due almost entirely to the writing off of inactive and unproductive properties. In order to wipe out this book deficit and to create a substantial book surplus, the management has recommended a change in the present $100 par common stock to capital stock without par value, with a stated value of $5 per share. This change will be submitted to the stockholders at the annual meeting in Springfield, Mass., March 22.

These are the outstanding facts revealed by the annual report of the company. Underlying the report is noted the determination on the part of the management to remove inactive and non-productive properties from its plant account, deflate the fictitious book values of its active properties and to establish a basis compatible with present-day valuations. Toward that end, it has created a subsidiary, the Textile Realty Co., in which has been segregated for liquidation inactive mills and miscellaneous properties; and has restated the book values of the remaining plant assets so as to remove from the books inconsistent and arbitrary valuation.

The company closed the year in a strong liquid position, with $8,440,266 cash, and U. S. Government securities, $6,384,089.

During 1931, the company retired the note indebtedness of the Webster and Shawsheen Mills, totaling $11,000,000, or $5,500,000 each. It has also reduced its mortgage indebtedness on its buildings in New York by $584,000. These reductions in the company's indebtedness will result in substantial savings in interest payments, Lionel J. Noah, president of the company, points out. New machinery has been installed in many of the company's plants, he states, and the company has also made other necessary manufacturing improvements.

In addition to the change in common stock, the shareholders at the annual meeting will be asked to approve a reduction in the authorized preferred stock so that it will consist of 478,648 shares. This reduction is to be accomplished by canceling 100,000 shares authorized, but never issued and by cancelling 21,352 shares acquired about ten years ago by American Woolen Co. of New York; being the shares carried in the balance sheet as treasury stock. The company made following statement:

"The management of the American Woolen Co. has decided to recommend a change in the present $100 par common stock to capital stock without par value, with a stated value of $5 per share, in order to facilitate an adjustment of book value of properties. In connection with the issuance of the annual statement for 1931 fiscal and calendar year, showing a loss after all charges, including depreciation and inventory markdown, of $2,836,826, against a similar loss of $4,897,584 in 1930, the executive committee recommends to stockholders favorable action at the annual meeting Mar. 22 on the proposed change in common stock, which is outlined in paragraph 5 of the call for the meeting as follows:

"'To consider and act on the matter of changing all the shares of common stock of the company into an equal number of shares without par value, and of reducing the capital liability applicable to such shares without par value to a stated liability of $5 per share, so as to eliminate a book deficit and create a book surplus. Said book deficit results almost entirely from an adjustment of the plant accounts of the company and the segregation and liquidation of certain inactive mills and other unproductive property which has been burdening the company with unnecessary charges.'"

In addition, a circular addressed to the stockholders by the executive committee states:

"For several years the company *(Continued on page 52)*

AMERICAN WOOLEN CO. CONDENSED BALANCE SHEET

Assets

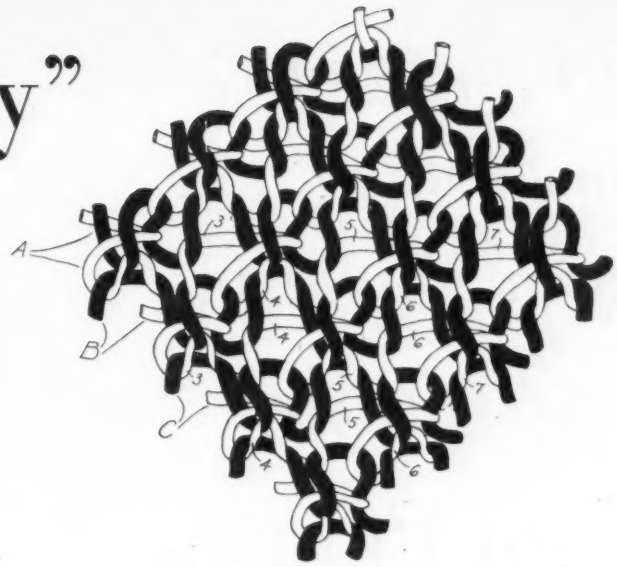
Current Assets —		
Cash in banks and on hand		$8,440,265
U. S. bonds and treasury certificates (market value $6,163,568.75)		6,384,088
Accounts and notes receivable, less reserves		5,368,225
Inventories, as taken by company at cost or market		20,818,472
Total current assets		$41,011,051
Investments in mortgage notes receivable, etc.		286,052
Investment in Textile Realty Co. — authorized and issued capital stock at par value		1,000
Fixed assets at approximate depreciated cost as determined by Charles T. Main, Inc., as of July 1, 1931, and additions since:		
Land, plant, equipment, etc.	$72,268,233	
Less reserve for depreciation	40,936,453	
		31,331,780
Deferred charges to future operations		166,833
Total		$72,796,718

Liabilities

Current Liabilities—			
Accounts payable, etc.			$241,807
Mortgage Payable Secured by New York Real Estate —			
Five per cent extended to July 1, 1934, $25,000 payable semiannually			1,225,000
Reserves for contingencies			1,203,790
Capital Stock — 7% Cumulative Preferred Stock ($100 par):			
Authorized	600,000 shares	$60,000,000	
Issued	500,000 shares	50,000,000	
Less treasury stock	21,352 shares	2,135,200	
Outstanding	478,648 shares	$47,864,800	
Common Stock —			
Authorized and issued — 400,000 shares $100 par value		$40,000,000	87,864,800
			$90,535,397
Deficit after writing off properties transferred to Textile Realty Co. and adjustment of other fixed assets — deduct			17,738,679
Total			$72,796,718

"Non-Run Hosiery" Development

to Be Controlled by Patent Pool



Details of construction of non-run fabric

A GROUP of licensed manufacturers, operating as a patent pool under the direction of Wm. R. Smith of the law firm of Lucke & Smith, Philadelphia, Pa., and formed under the promotional activities of the Apex Hosiery Co., Philadelphia, will soon enter into the commercial production of non-run women's hosiery, according to a recent announcement which has created considerable interest in the hosiery field.

The basic patent upon which the pool rests is that secured by Nathan Schwartz, Newark, N. J., on Oct. 9, 1923. It has lain dormant since that time. In addition to this, it is stated that the pool controls other patents "necessary to the economical and practical manufacture of non-run stockings."

While the initial organization of the patent pool has been practically completed, according to Attorney Smith, a "complete patent monopoly" is contemplated as the first step toward the protecting of mills licensed by the pool; and it is stated that suggestions from manufacturers will be welcomed in order that complete data and patent information that might be used to advantage in laying out the program of operation may be obtained.

An abstract containing the essential features of the Schwartz patent follows:

The object of my invention is to provide a new and novel method or process of knitting in which the old loops, before they are cast off the pins or needles, are interengaged and locked in such manner that when the thread breaks, unroving cannot take place beyond the next succeeding interengaged or locked loop. Under my improved mode of knitting, the thread runs across the fabric the same as before, and each row of loops hangs upon the succeeding row the same as before; but every other stitch or loop is interengaged or locked with its neighbor alternately in succeeding rows, or, if desired, the stitches or loops may be interengaged or locked at certain intervals alternately in succeeding rows.

In my improved mode of knitting, I have contrived to produce a non-raveling fabric by first interengaging or locking either every other stitch or loop or certain interval stitches or loops in the first row, then alternating the system of interengaging or locking in the second row, and so on similarly interengaging and alternating throughout the succeeding rows.

Thus in the accompanying drawing, let the characters *A*, *B*, and *C* represent succeeding cross rows of loops, and the numerals 3, 4, 5, 6 and 7 represent the successive loops of each interlocking course. Consider first the method of interengaging or locking every other loop. In row *A*, for instance, there is shown a course of plain (black) loops, then a course of interlocking (white) loops. In knitting the interlocking course, plain loops are first formed; and then, before the same are cast off their needles, loop 3 is spread and hung one-half of it alongside loop 4 on the needle carrying loop 4. Loop 4 is skipped; but loop 5 is similarly spread and one-half of it hung alongside loop 6 on the needle-carrying loop 6. Loop 6 is skipped, and loop 7 is divided and spread one-half of it on its next succeeding neighbor (not shown), and so on throughout the length of the row. From this method of procedure, it will be understood at once that one-half of a loop hangs from every other needle (in the knit fabric from every other loop immediately above), while a loop and a half hangs from every other succeeding needle (in the knit fabric from every other succeeding loop immediately above), and that in thus spreading every other loop the thread thereof is engaged over, tightened, and locked upon the undivided loop.

In row *B*, loop 3 is skipped, since in row *A* the corresponding loop 3 was locked with loop 4. In row *B*, loop 4 is spread and hung upon the needle carrying loop 5, since in row *A*, loop 4 was skipped and left undivided. And so on similarly throughout row *B*, the alternates of row *A* are divided and spread over two needles. In row *C*, loops 4, 6, and so on, are skipped in correspondence with the skips made in row *A*, the same representing the alternates of row *B*. In this manner I proceed to knit the whole fabric, dividing, spreading, and interlocking every other loop alternately in succeeding rows.

This method of spreading, interlocking, and skipping loops alternately in successive rows may be employed in a variety of forms, which readily suggest themselves. Thus, in the first row, instead of skipping loops 4 and 6, as above described, loops 4 and 5 may be skipped, loop 6 spread and interlocked, the two loops following 6 skipped, and so on progressively skipping by consecutive twos throughout the row. In row *B*, loop 4 would be spread and interlocked, loops 5 and 6 skipped; and so on along the row, spreading and interlocking one loop and skipping two loops. In row *C*, loop 5 is locked and spread, loops 6 and 7 skipped, and so on as before. With this form, in row *A* loop 3 is interlocked with loop 4; in row *B*, loop 4 is interlocked with loop 5, and in row *C*, loop 5 is interlocked with loop 6. Should a thread break, only two stitches or loops can unravel.

In a similar manner, three, four, five, or any desired number of consecutive loops may be skipped in each row, the spreading and interlocking taking place at equivalent intervals. In this connection, it will be understood that, if a thread breaks where three loops are skipped, three loops only will unravel; if it breaks where four loops are skipped, four loops will unravel.

Variations in Color, Construction and Finish Found in Seasonable Wool Fabrics

By George R. Stevens

IN LOOKING over the fabric division of the woolen and worsted field, several constructions come to light which appear to offer a substantial bid for popularity. A careful inspection of these fabrics reveals that they involve certain peculiarities and variations in finish and construction which have served as their basis for interest and appeal.

Fig. 1 shows a very neat pattern design in black and white worsted suiting—clear cut in effect as a cameo. In an assortment of samples, this pattern catches the eye at first glance. The resulting fabric is illustrated at Fig. 2.

It is made with a fine cross-bred wool spun to a 2/30s worsted yarn for use in both warp and filling; and it is partly due to this quality of wool that the pattern shows such a clear-cut effect.

The warp layout is made up of 3,584 threads, dressed one white and one black and drawn in straight on eight harnesses. The filling is also dressed one white and one black. The chain and drawing-in draft show the location of the yarns. It is reeded in a fourteen reed, four threads per dent, the width being 64 in. plus the selvage.

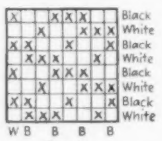


Fig. 1

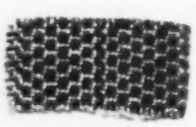


Fig. 2

The weight at the loom is 15.4 oz., and a clear finish is desired. If careful attention is given to spooling, dressing, and weaving, the goods should correspond almost exactly with the figured specifications.

Care Essential in Finishing Department

It is hardly necessary to suggest to the burling and sewing departments that this fabric should be very carefully handled; but it might be well to emphasize that any broken warp thread should be carefully repaired in the sewing department and that, in burling, all knots should be carefully drawn to the back of the cloth but not cut off until after the goods are carefully scoured and dried.

A little steam brushing before going to the press will improve the handle of the fabric, as also will the practice of allowing the cloth to stay on the press roll over night. A run through a steam conditioning or sponging machine, allowing the goods to remain on the roll wrapped up with the mantle cloth, will also aid in securing a good handle.

Figs. 3 and 4 represent respectively the design and fabric for a fine woolen suiting for men's wear. This pattern is made with a $4\frac{1}{2}$-run warp and a $4\frac{3}{4}$-run filling, and a good twelve-months' Texas wool is recommended for the best results. The average layout is about 3,240 ends of $4\frac{1}{2}$-run yarn for the warp, and the filling may be of the same count; or, if it is desired to have the loom weight a trifle lighter, the filling may be spun a little finer than the warp. This gives the finishing room a chance to shrink the fabric lengthwise a small amount, thus producing a firmer and more satisfactory fabric for men's wear. A point such as this is well worth the consideration of any woolen-mill executive. Such small items as this often establish the reputation of a mill and hold its trade with the clothing manufacturer.

Suitable for Men's and Women's Wear

A very interesting broken-up design or figure is portrayed in the fabric illustrated at Fig. 6, while the weave for this material is shown at Fig. 5. The weave is of the ordinary nondescript variety, known as a "granite weave"; but owing to the arrangement of the warp and filling thread, the weave makes an attractive pattern for men's wear suitings. If constructed of fairly heavy yarns in the popular colors for women's coatings, it should prove very desirable—especially when made in the rougher cheviot wools. There is a large opportunity in this weave for a skillful colorist to produce very rich combinations of color in the various crossing of warp and filling.

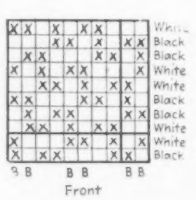


Fig. 5

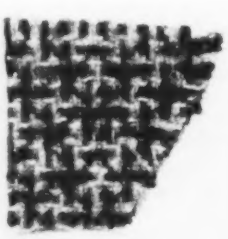


Fig. 6

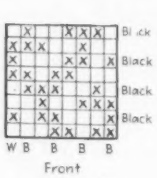


Fig. 3

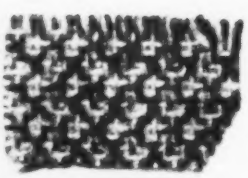


Fig. 4

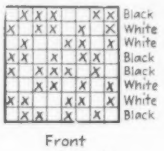


Fig. 7

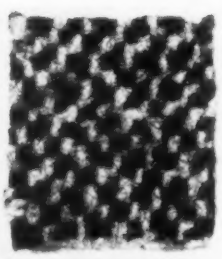


Fig. 8

If designed for men's suiting fabrics, the layout would be very similar to that suggested for the weave at Fig. 3—that is, with respect to ends and reeding. The dressing pattern is one black, two white, two black, two white, two black, and one white; and it requires two repeats of the ten-harness draft before the colors repeat on the same harness.

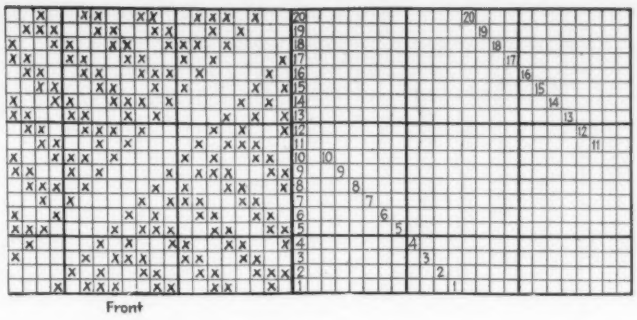


Fig. 9

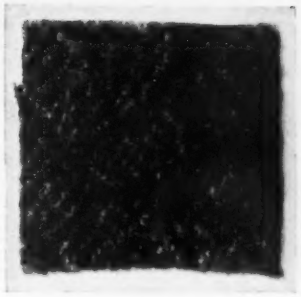


Fig. 10

The filling pattern is two black and two white; and, as in the previous case, it requires two repeats of the chain before the colors repeat on the same bars.

A fabric constructed from heavy yarn is illustrated at Fig. 8, and the weave from which it was derived is shown at Fig. 7. This also is suitable for both men's and women's coating fabrics, especially when made in bright colors for the latter group. It is suggested that when this fabric is intended for women's wear, a little laid nap or brushed finish, as it is often called, would soften the effect and blend the warp and filling colorings, so that instead of the cloth showing two distinct colors, they would be blended into a mixture.

Novelty Effect Easily Secured

An attractive novelty effect might be secured if the designer should insert a few picks of plied yarns made up of two fine threads of different, but harmonious, colors. This plied yarn could be made on a bobbin winder, and the doubled yarn would show possibly one turn of twist in 1½ in. of yarn. The resultant fabric will contain flaked or blotched effects, making very attractive patterns; and the brushed or napped finish will blend the warp and fillings in a pleasing manner.

The product of a well-known Scotch manufacturing company is represented in Fig. 10, the weave shown in Fig. 9 being used for its construction. The nature of the fabric together with its fancy woven effect makes it suntable for both men's and women's wear when made up in suitable colorings.

The layout requires about 3,000 warp threads plus the selvage, and two-run yarn is used in both warp and filling. It is reeded in an 11/4 reed, and the width is 68 in. inside selvages. The construction of the filling is 36 picks per inch, and a high quarter-blood wool is employed in both warp and filling yarn.

In the fulling of this fabric a medium light soap is used; and very light trapping is desirable, because if much felting is brought about, it will spoil the handle of the fabric completely.

◆

Wool Men Capitalize Washington Bi-Centennial

Red, white and blue sticker prepared for use by wool trade

IN connection with the celebration of the George Washington Bi-Centennial, arrangements have been made by the National Wool Marketing Corp. to supply stickers as illustrated herewith in sufficient quantities to all branches of the wool industry including growers, dealers, manufacturers, cutting-up trade and distributors at a very moderate price to cover cost. It is an interesting extension of the promotional idea which crystallized in National Wool Week last fall. It suggests various possibilities of tie-up with national events for some other branches of the textile industry.

Frank E. Fitzpatrick, Washington representative of the National Wool Marketing Corp., offers the following historical background material:

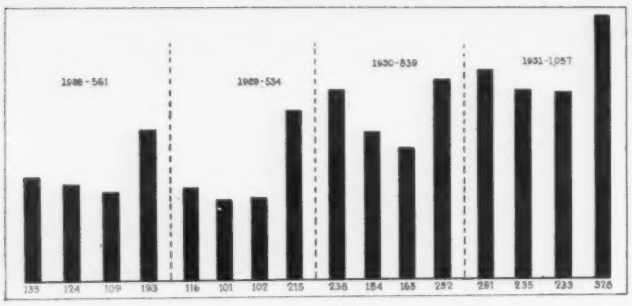
"The American wool industry is rich in patriotic endeavor. The early colonists clothed themselves with wool homespun materials. George Washington at Mount Vernon always had a flock of sheep on his homestead and constantly wore homespuns produced from their wool.

"It is interesting to recall that Betsy Ross made the first American Flag of wool bunting and from that day to this, our National Flag has been made from wool.

"John Brown, the abolitionist of Harper's Ferry fame was a wool sorter by profession.

"The first flock of sheep was imported into Jamestown, Virginia, from England in 1609. The first incorporated woolen mill established in the United States was at Byfield, Mass., in 1794.

"The Hartford (Conn.) Woolen Co. supplied George Washington with his inaugural suit made from American produced wool. Colonel David Humphrey who operated a mill in Derby, Conn., in 1803 sent President-elect Madison a coat made from the finest merino wool."



Number of business insolvencies in textile trades by quarters, 1928-1931

1931 Textile Insolvencies

Set Record, Survey Shows

BUSINESS insolvencies in the cutting-up and piece goods divisions of the textile industry represented an indebtedness of $50,939,000 on the part of 1,037 companies, with the silk trade in the lead, according to a survey just completed by the National Credit Office, New York. In a statement accompanying the figures, P. A. Gerlach, vice-president of the Credit Office, comments that the figures set a record for insolvencies in the history of the textile industry. He continues:

"In rounding out the year 1931, business insolvencies in the cutting-up and piece goods divisions of the textile industry have added a further substantial contribution to trade mortality tables.

"The high mark registered during the last quarter of 1931 furnished a startling climax to a year outstanding in embarrassments, both in numbers of failures and amount of monetary losses.

"The totals for 1931 compared with 1930, show an increase of 26% in number of failures and 26% in amount of liabilities.

"The highest percentage of change in any one line is reported in the miscellaneous silk group, with an increase of 52%, while next in line is the dress and costume trade with an increase of 45%. The lowest increase is shown in the coat and suit trade with 4%.

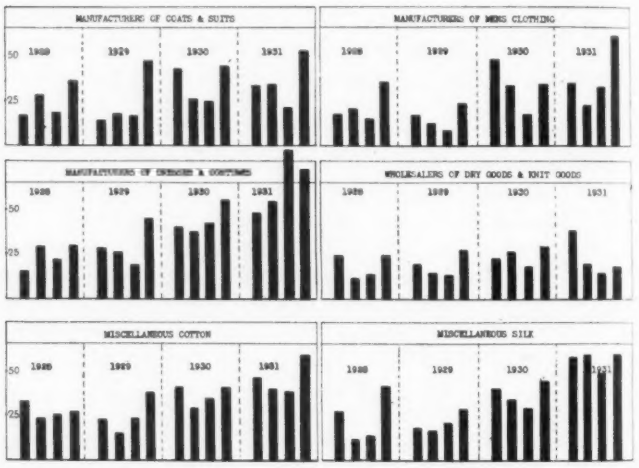
"All lines of trade covered by this survey show increases in the number of defaults over the previous year with the exception of the wholesale dry goods industry, which registered a slight decrease.

"It is also noted that each of the quarterly totals of last year's failures show increases in every instance over the same quarters of the previous year, the last quarter standing out as a record high for any one period.

"The percentages of increases by quarters:

1st Quarter—10%	3rd Quarter—41%
2nd Quarter—28%	4th Quarter—30%

"While monetary losses for 1931 show an increase in the aggregate amount over 1930, a much more favorable aspect in the comparisons is apparent in other respects.



Number of business insolvencies in textile trades by quarters, 1928-1931, and by trade subdivisions

"It is encouraging to note that in three major divisions of trade there is a decrease in the amount of liabilities. The heavy burden of increase was carried by the cotton and silk divisions.

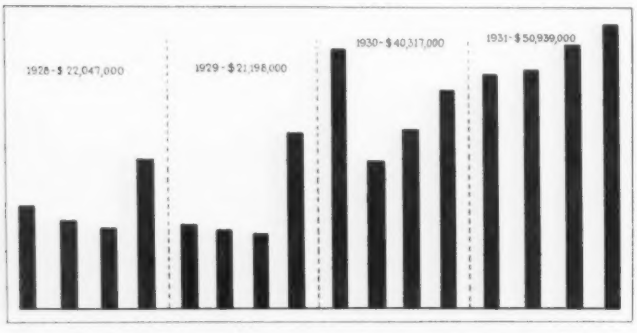
"The percentages of variations in dollar credit losses for 1931 over 1930 in respective lines of trade are:

Decreases		Increases	
Coat & Suit Mfrs.	21%	Dress & Costume Mfrs.	58%
Clothing Mfrs.	18%	Cottons, Miscellaneous	84%
Wholesale Dry Goods	39%	Silks, Miscellaneous	45%

"Disconcerting as the insolvency reports may at first appear, there is a favorable aspect in the interpretation of these records.

"The heavy mortality of failures discloses a continued liquidation of inefficient business units as well as the elimination of those concerns which have delayed making the proper adjustments vital to carrying on operations profitably.

"This weeding out process will tend to help strengthen the business structure of the textile industry and as the productive capacity comes into alignment with current requirements, there will be a more rapid approach to the period when a sustained recovery will be a reality."



Liabilities of business insolvencies in textile trades by quarters, 1928-1931

Buyer Cooperation

Vital to Success of Cheney Plan, Says Kent Mitchel

MANY questions which buyers and sellers of broadsilks have been asking regarding the new production and merchandising policy initiated by Cheney Brothers, were answered in the address delivered by Kent Mitchel, merchandise manager of Cheney Brothers, before the Piece Goods Section of the National Retail Dry Goods Association, at that body's recent convention in New York.

Mr. Mitchel gave an intimate and striking picture of the new plan adopted by his company early this season. The policy which includes limitation of initial printings of designs to protect customers against piracy, among its chief points, excited much interest in the industry and has had a stimulating effect on the current market.

Bearing on the merchandising aspect, Mr. Mitchel enumerated ten specific recommendations for piece goods selling by retailers, as follows:

1. Confine your purchases among a reasonable number of sources.
2. Do not trade down from your established price points.
3. Do not make your department known to your customers primarily for low grade sales events.
4. Be very cautious about running more colors in a plain goods line than are selling in dresses in a ready-to-wear department.
5. Tie up your displays of piece goods with up-to-the-minute dress patterns and well made model dresses.
6. Change your department displays very frequently.
7. Institute major department, window and advertising displays around the best promotion dates of the year—such as Easter, summer vacation, Labor Day, back to school, late Fall and so on.
8. Keep your stocks constantly fresh by taking your mark-downs promptly.
9. Do not attempt to meet every price-sale in every competitive store—buy and sell to make a profit.
10. Remember that any move toward better prices and better profits should start from the top—not from the bottom.

An abstract of the balance of his address explaining the background and aims of the policy follows:

"If a manufacturer of prints produces heavily during the early part of the season, he will be able to deliver immediately to you anything you may wish. But regardless of how carefully he may style his line, he will certainly produce quantities of some items which will not find ready acceptance by you. In a comparatively short time he will find himself faced with an inventory, which good business judgment will indicate that he should very substantially reduce.

"As we all know over the last several years inventory reductions of this sort have taken place and apparently it has not been possible to direct them in the bests interests of the customers who already purchased. The result was, and probably would be again, that prints which had sold nicely, as well as those which had not, would be offered indiscriminately at lower prices, permitting competitors of yours to buy the same prints you had bought earlier at a lower price, and compelling you to mark down prints which you had bought to a price which would not return to you your normal mark-up."

He then described the specifications of the Cheney print restriction plan, with which the trade now is familiar; and proceeded:

"In any operation between two people there must be a certain amount of give and take. The points which I have mentioned in our policies represent a considerable amount of give on our part, as small printings and confined selling are certainly more costly and limiting than large print runs and unconfined selling.

"The cooperation which we asked of you has been in giving us a little more time when necessary to fill your re-orders. Instead of immediate delivery at all times out of stock, we have asked you to accept at times two week delivery, on a basis of printing to order. The price of our protection is that occasionally you wait one or two weeks.

Discussing the problem of weak prices, he said:

"Believing as we do so sincerely in the fundamental necessity of maintenance of your price points and your mark-up, we believe that fabrics should be created with these two things as their basis. For instance, in bringing out new fabrics, we invariably build a cloth to a price point. If the cloth we have in mind should be a $2.95 retailer, we deliberately work from the very beginning to produce the finest cloth of the sort, which we can possibly offer to sell to you at $1.75.

"Almost all of us in the piece goods business for some time have been carrying far too many colors; it follows simply that you cannot carry many colors and still have a reasonable inventory. We have been endeavoring to work with you in the solving of this problem by recommending that, even though you were willing to buy more, you confine your purchases to color cards which in general show 10 colors for some fabrics, 20 colors for others, and 30 for a few. The pressure we have put on our customers to operate in these smaller color ranges has no doubt lost us some volume, but has equally without doubt saved some buyers a loss they would otherwise have taken on inventory mark-down caused from too many colors."

New Metals and Speeds for Cotton Ring Frame

By E. E. Blake
Saco-Lowell Shops, Boston, Mass.

IT IS my belief that the textile machinery manufacturers have been forward looking and have pioneered in mechanical development. The period of 1880 to 1920 in this country was one of rather steady growth, on the average, in the number of mills and spindles, North and South. During that time, the machinery people were called upon to improve their product, but not to revolutionize the process. The opportunity and the demand since then have been for changes of a more fundamental nature.

The structural materials which were available during the first years of that period were almost entirely limited to cast iron and wrought iron. Due to the later development of commercial steels, wrought iron was, by 1900, almost entirely replaced by a small number of carbon steels. The advent of the automobile during the first few years of the 20th century made it necessary to produce steel having greater strength, and also a toughness far beyond that of existing steels, and steel manufacturers were compelled to perfect a considerable number of high-grade carbon and alloy steels.

Ordnance and other requirements during the World War led to still further developments in metals, and so at the beginning of the last decade industry had for the asking a large selection of desirable materials for machine construction. To take advantage of these advancements in materials, it was necessary to go one step further and to subject them to processes of heat treatment in order to bring out their maximum possibilities. Where in the past it had been the exception to harden or heat treat a part of a machine, it now became advantageous to harden or heat treat all important parts in order to obtain greater strength and hardness, with corresponding toughness and long wear, resulting in many cases in lighter weight and better-designed parts.

The manufacturers of high-grade textile machinery were not slow in adopting these new materials, and the leaders placed their metallurgical operations throughout the plant in charge of engineers trained in the selection of materials and their heat treatment. Well-equipped chemical and testing laboratories to check up on incoming materials were installed and heat-treatment equipment was put in to prepare such materials and parts for the purpose they were to serve.

Cast iron will always occupy a major position in the list of materials used for the manufacture of textile machinery, because it is readily made into intricate castings and can be easily machined. The perfection of the art of electric welding and the development of machinery for working steel plate have, however, opened a new field to the machinery builder. By the use of steel, together with electric welding, structural parts of machinery can be built which are oftentimes not only of better design, but can be made of lighter weight than as if made of cast iron, as steel is stronger than cast iron, and under bending stress has 2½ times the stiffness. The use of fabricated steel is finding increased favor.

The statement just made, that steel is 2½ times as stiff as cast iron, I think may be a surprise to some, for I find most people are under the impression that the opposite is true. If we were to place a cast iron bar here on two straight edges, say four feet part, and beside it a steel bar of the same cross-section, and were to hang a weight in the middle of each, the two weights to be precisely the same, it would be found that the cast iron would bend just 2½ times as much as the steel. The steel varies in tensile strength according to the character of the steel, but in all cases is from two to considerably more times as strong as cast iron. While the compressive strength of cast iron is greater than that of steel, the factor of safety required in the use of cast iron is much higher than in the case of steel, with the practical results that the steel has greater compressive strength. Steel, of course, is much less likely to fracture, and the stress put upon any part of the machine is more often one of tension than of compression. In either case, the compressive value of the metal is much higher than the tensile and, therefore, the designer more properly bears in mind the tensile requirements than the compressive.

To make some more specific, concrete applications to the parts of the machine in which you are interested—the machinery people can furnish you today with spinning spindles that are unquestionably far superior to the very best they were able to make only a few years ago. Not only is this true as regards straightness, roundness and design, but the advent of new electric alloy spindle steel, and the processes for hardening and tempering explain further some of the improvements in spindles.

Another important part of the frame, of course, is the steel roll. There has been improvement in the steel for

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In this article Mr. Blake discusses two subjects: metallurgical progress as it affects textile machinery, and the selection of suitable spindle speeds. In connection with the latter topic, he explains why lower spindle speeds are necessary when larger rings are employed and why traveler speeds may be increased a certain amount. The article is abstracted from Mr. Blake's address at the Spinning Overseers' Forum held under the auspices of the National Association of Cotton Manufacturers in Boston, Dec. 10. The original talk reviewed recent research activities, all of which have been reported in past issues of TEXTILE WORLD.

making rolls, in the method of making, in the design of the roll, and in the method of finishing. The smoothness of the flute now attainable we were not able to accomplish a few years ago. Case hardening of the steel rolls, as already mentioned, has undergone a remarkable advance. A far more satisfactory roll than the best that we could offer a few years ago is commonplace today.

In regard to the rings, the same may be said. Rings were made of wrought iron until nearly 1890. The development of steels during the last 30 years has constantly improved the ring. The practice and methods of manufacture have also come along in the same development. The higher speeds demanded of the rings and the better performance of the spindles have urged or provided the opportunity for this development.

The material used in the gears varies according to the location and duty of the gears. It does not seem so many years ago since pig iron was tested and judged by the foundry foreman alone, from the fracture of the pig. The same pig may present a very different appearance according to the difference in the method of fracture, and at best the foundry foreman could not know so accurately what was required in the way of his mix as is commonplace now. We have metallurgical and chemical laboratories. We buy iron on specification, a very careful analysis is made of each carload of iron, and a very careful analysis is made of the mixture melted from day to day. Iron of certain specifications is required for certain parts of our product, and iron of other specifications for other parts; and this is carefully controlled.

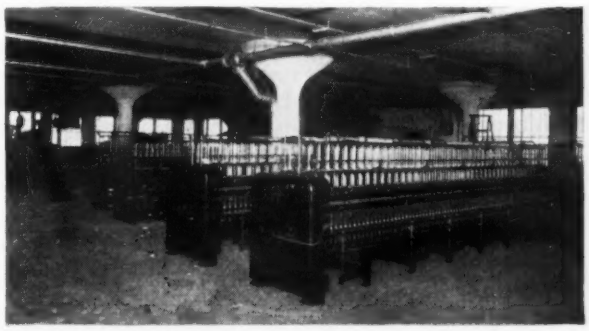
Spindle Speeds

May I now refer to some items of spinning-frame performance and suggest consideration of a different approach to questions of how best to handle a spinning frame. No doubt the superintendent and the overseer are obliged to use to the best advantage the tools and equipment furnished them. Nevertheless, an even more thorough knowledge of the equipment and its performance will doubtless aid these very men.

I have something of a hobby in that I urge acquiring the habit of asking ourselves, and others, the old simple —why? I have always felt that when we were certain that we had dissected or analyzed the problem so as to have all of the factors separately and clearly before us, and we thoroughly understood each factor in the make-up of the whole problem, we then could put the whole together with a clear understanding of it, and if an answer is called for, the answer then would be plain. The minutes of your meeting of Nov. 14, 1929, record that the discussion started by asking what would be the best spindle speed for 40s warp, and testimony was given to show that speeds ranging from 9,000 to 9,500 were common. Allusions were made in that meeting to different staples and different traverses, and these certainly are among the governing factors. There are others, however, and there is one in particular which I do not often hear included in such a discussion, and that is traveler speed. In our own recent spinning-frame pamphlet we have included a column of traveler speeds to accompany the respective ring sizes and spindle speeds. I wish we might have included a column or table giving dimensions of all sizes of rings, in terms of the circumstance. However, one can readily determine his traveler speed in feet per minute.

At the meeting referred to, one member stated that he ran satisfactorily at 9,500 r.p.m. with $1\frac{5}{8}$-in. rings, but when he tried the same rate on $1\frac{3}{4}$-in. rings he was obliged to reduce the speed. I suggest that he might properly have stated that at 9,500 r.p.m. with $1\frac{5}{8}$-in. rings, which is a traveler speed of 4,035 ft. per minute, his work ran all right, but when he tried to run 9,500 with $1\frac{3}{4}$-in. rings, which gives a traveler speed of 4,352, his work did not run well.

There are other factors that may have entered this problem here, such as diameter of bobbin, angle of pull of yarn, traveler used, weight of package for spindle employed, viscosity of oil, plumbing of spindles, and possibly others; but on the assumption that all such factors were normal, it appears that a difference of 320 ft. in traveler speed made the difference in running. I can easily believe that, and I am pleading for more consideration of this problem; for I want to point out that with the same traveler speed the friction or drag of the same weight of traveler would be less with the larger diameter of ring. This can be proved by experience and also very easily by mathematics. In mathematics or in high-school physics, we learn that the centrifugal force increases according to the square of the velocity, but decreases directly with the radius of the circle. This is easy to remember as follows: Centrifugal force equals mass times velocity squared divided by the radius.



Small rings permit higher spindle speeds because the traveler moves a shorter distance in one revolution, but it is possible to increase the speed of the traveler a certain amount on the larger rings

So to pursue that problem a step further, had the member reduced his spindle speed with $1\frac{3}{4}$-in. ring to keep the same traveler speed, he would have reduced the drag of the traveler 1/14, or 7% plus. On the other hand, had he maintained the same spindle speed, he would have increased the drag in proportion to the square of the increased traveler velocity modified by the larger diameter of ring. This figures an increase of drag of 8% over the original 9,500 r.p.m. with $1\frac{5}{8}$-in. ring.

It appears it is not necessary to reduce the spindle speed enough to maintain the same traveler speed as with the smaller ring when going to a larger ring. Therefore, what spindle speed will give the same traveler drag with $1\frac{3}{4}$ in. as with 9,500 r.p.m. and $1\frac{5}{8}$-in. ring? This figures out 9,135 r.p.m. This also figures a traveler speed of 4,175 ft.

It may be some will say they do not believe that an increase of 8% will make the difference I found. I hope that, if it is not the traveler speed, you will be able to prove it, for that will bring us back again to the "why," and when we get the true answer to the "why," we shall find our real limitation and be able to move ahead. We sometimes hear it said that theory and practice do not always agree. I believe if we adopt the word "explanation" rather than theory we shall often gain by it, and surely practice and explanation must go hand in hand.

The Struggle Against Speed Limitations of Cotton Traveler

By J. L. Truslow
Whitin Machine Works, Whitinsville, Mass.

Mr. Truslow calls attention to some interesting investigations being conducted on the traveler of the cotton ring frame. The results may lead to important improvements in the speed and efficiency of ring spinning. He also explains why certain European spinning developments are not applicable to American conditions. The accompanying article is an abstract of Mr. Truslow's address at the Spinning Overseers' Forum of the National Association of Cotton Manufacturers, held on Dec. 10 in Boston, report of which has recently been released.

WHEN I was a youngster just after the war, I had a job as a mechanic on a flying field; and I hadn't been on the field very long when I discovered that there were two social classes, the flying officers and the ground officers. The latter were called "kiwis" after a certain Australian bird that does not fly. The flying officers didn't think very much of the kiwis, and wouldn't listen to them on any subject pertaining to flying—and, I think, with some reason.

Well, ever since I have been in the textile-machinery business I have rather felt that I, and my brother machinery men, bear about the same relation to practical spinners as the kiwis did to the flying officers. I noticed, however, that every now and then a ground officer would go out to the Curtis plant in Binghamton and would come back with the latest news that was to be had on the planes; and that was the one time that the flying officers would listen to the ground officers. So I am hoping that you flying officers will listen with indulgence to a kiwi today, because my news is entirely about the planes. As to how to run them—that is not in my province.

We all of us know that the limiting factor in the speed of the spinning frame is mainly the traveler. There are other factors, but they are not so important as the traveler.

In the past we have had various rules of thumb for helping us to determine what traveler speeds could be run. The rule which I first heard, I remember, was that a traveler should not run at a speed higher than a mile a minute. In practice it quickly becomes evident that in most cases we cannot run a speed so great as this, and in a few cases we can run a speed a little higher than this. Therefore, the rule was not very helpful.

The next step was to segregate the yarns which are spun according to number and assign safe traveler speeds for different ranges of yarn. We will say that a certain traveler speed would be assigned for yarns from 0 to 20s; and another, from 20s to 50s; and others, from there up.

This was a step in advance; but if those speeds were to be plotted in the form of a curve, we should observe a series of steps or sudden transitions from the upper limit of one range of yarns to the lower limit of the next. We have been trying to rationalize this subject a little bit, and have had a rather interesting time with it. The work is not over by a long shot.

Basic Consideration Is Wear

In the first place, the traveler speed is not really what we are interested in. It is the wearing out of the traveler; and this wearing out of the traveler is due to the force with which the traveler bears against the inside of the ring—the centrifugal force. In approaching it from the mathematical point of view, we had some reason to hope that one of the factors involved in centrifugal force would more or less cancel out, and that is the weight of the traveler. It tends to cancel out as against the number of the yarn, so that it looked a little hopeful that we might be able to evolve a rule and say that the centrifugal acceleration of the traveler should be a constant.

Trying this out against yarn speeds which we knew were running in mills and which were considered about as high as it was safe to go, we found that the centrifugal acceleration is not a constant, but that it is somewhere near a constant. The next step was to introduce into the equation empirical factors to correct for the minor factors which influence the centrifugal acceleration. After a good deal of cutting and trying and comparison with actual operation in the mill, we derived a formula which gave us the spindle speed directly for any number of yarn and any size of ring, assuming that normal conditions existed; i.e., that the frames had the proper gauge, that the normal staple of cotton was being run, etc.

Of course, in any rule of this sort it is necessary to make a number of assumptions, and in applying the rule we merely use it as a satisfactory starting point. Having secured a formula which looked fairly good for common sizes of ring and common numbers of yarn, we thought it would be interesting to extend that formula a little bit to uncommon sizes of yarn and unusual ring diameters; and we found out what we might have expected—that there is a very interesting relation between the ring diameter and the size of the yarn in connection with the possible theoretical traveler speed.

If you are spinning, we shall say 20s yarn, on a 2-in. ring, you can substitute into your formula and get a spindle speed that would be recognized as being reasonable. If you take the same 20s yarn and try to spin it on a 3-in. diameter ring, the spindle speed which you get from the theoretical formula is somewhat higher than you would expect; and after going through the thing pretty carefully from the experimental point of view, we

decided that this was a condition that was perfectly right and natural.

Perhaps the best way of making clear what I mean is to compare two automobiles, one running on a circular track, say about 200 yd. in diameter, and the other running on a track a mile in diameter. Naturally on the track having a smaller diameter you are turning a sharper curve, and experience would show you that you can run a higher speed on the larger track without burning out your tires than you could on the smaller track. Well, that is exactly what seems to be the case in connection with the travelers. I cite this research not as a finished thing, but in order to give you some idea of the type of work which is being done.

European Practice

Now one source of inspiration for improvement is the practice in other countries than our own, and that is an extremely interesting field. When we speak of other countries than our own we usually mean England and the Continent of Europe; and this last year and the year before that I was sent over on trips to try to find out what was being done on the other side in the way of advanced practice, and to see whether their ideas could be adapted to our use in this country.

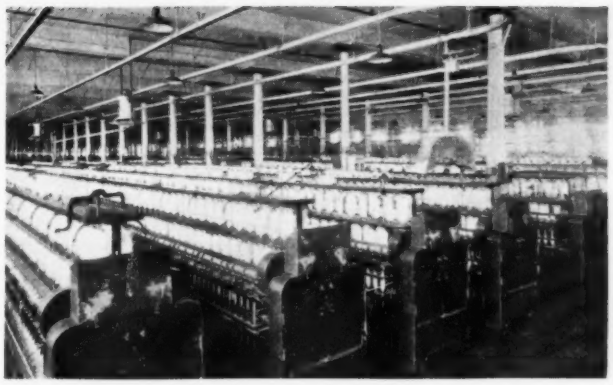
It is a very easy thing to get led into trouble in trying to use European ideas in this country because the conditions which the European mills confront are very different from those which prevail over here. I am frequently asked why it is that in Germany they are spinning in certain mills yarn as fine as 30s, we shall say, direct from the drawing frame sliver. They ask why we are not on our jobs producing machines which will allow us to do the same thing in this country. Frequently the question of other devices used over there is brought up by progressive mill men who have read about them in textile papers.

I think the best example of how different their conditions are might be found in a mill which I visited in Spain, not very far from Barcelona. I went into this mill and walked through the spinning room with the overseer. I felt quite at home. The overseer was wearing a straw hat just like an honest New England spinner. He felt the ends of yarn in just the same way; and everything seemed very natural, except that there was a sense of crowding, and I couldn't quite understand it until I noticed that the room was simply teeming with help. I asked the man how many sides a spinner would run, and he said: "One girl runs one side." And that was exactly the case.

Every side had a girl standing in front of it, and by her feet was one of those Spanish water bottles. She stood there and stared at that side all day long. If we were confronted with a situation like that, we should meet it in just the way the Spanish spinners have met it. They are prevented by labor regulations and by custom, which is still stronger over there, from spreading out their help, so that they have to lower their costs in a different way.

In the first place, they reduce the quality of their cotton to a degree which would be unbelievable over here. They run Indian and African cotton of staples ranging from $\frac{7}{8}$ in. up to $\frac{5}{8}$ in. in yarn counts up as fine as 30s. They run spinning frames 600 spindles long. The idea of that is that if a girl is going to watch one side, it might as well be a long side.

Another thing that they do is to speed up as hard as they can. This man told me that he kept a very careful record of ends down in the spinning room. I said that this was interesting, and asked him what the record was. He said, "If my ends down per hundred spindles per hour are not at least fifteen, I know that it is time for me to speed up some more, or to lower my cotton." It is awfully hard for an American to get used to what they are doing. The only reason I mention this is to show how different their problems are, and why it is they can do things that with our conditions we can't do.



Greater traveler speed is possible on large rings because travelers, like automobile tires, are subject to less friction on wide curves than on sharp ones

Super-Draft Spinning

For instance, take some of these devices that they use over there for spinning with super-draft. They seem to have a good deal of success, but they require a tremendous amount of cleaning. I think that in their present state of development they require a prohibitive amount of cleaning, but if a girl is going to stand there and watch one side, she might just as well be cleaning as doing anything else. So you see, it isn't possible to take systems from Europe and introduce them into this country without change.

Another example along the same lines, I think, is to be found in the long-draft spinning system with which I have been most closely connected, the Casablancas. It was originally brought here from Spain and applied without modification to American frames. Looking back over the history of that system, I feel that its record in the early days was not a particularly enviable one. When we took it over, we had to modify it considerably in order to adapt it to American conditions.

Fear of Obsolescence

In regard to research, there is one thing which I think ought to be brought out before I stop. In going around the mills I frequently hear a man say: "We would like to buy new spinning, but things are moving so fast nowadays that we are afraid to buy it, because in two or three years some radical change may come out which will make all our machines obsolete."

We try to make it our business to know what is going on in the world of ideas in regard to spinning, and I feel quite safe in saying that there is not under way at the present time anywhere in the world any idea with regard to spinning which is going to change it radically with regard to the principles involved. Great refinement is possible. Many an attachment can be devised which will improve the operation of the spinning frame and reduce the cost of spinning, but as for a frame suddenly appearing out of a clear sky which will make the present spinning frame obsolete and a liability to the mills, I just do not expect it to happen.

Overseers' Round-Table

This department offers a new subject for discussion each week and gives readers' comments on problems introduced during previous weeks. The subject which was opened four weeks ago is closed this week and a summary of contributed ideas is given on opposite page

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Overseer as Teacher

Editor, Overseers' Round-Table:

I AGREE with Bill. Either a man has the ability to impart his knowledge to others, or he has not. Unfortunately, many of the best thinkers and workers cannot coherently explain their ideas. I think the reason is that these people think faster than they can talk. Often the final solution to a problem will flash through their minds, but if they stop to tell it, or try to reason it out step by step, they will only jumble it up in their own brains.

Perhaps such people are not the best for overseers, but they certainly deserve the better jobs. They usually depend upon themselves to get results; so, perhaps, by their example, their departments would compare favorably with others.

W. F. P.

Editor, Overseers' Round-Table:

THERE IS not a doubt but that it would be mutually profitable, for the company, overseers and help to have some well qualified man come in and give a demonstration of the proper methods of teaching.

There are many men well equipped with knowledge who would be glad to teach others, but just do not have the knack of imparting their ideas. The right kind of a teacher would help men of this type to get their ideas across and thus give the young fellows a chance to benefit from the acquired learning of the experienced overseers.

W. D. BARTON.

Editor, Overseers' Round-Table:

DO I BELIEVE that it would be practical and advantageous to explain to overseers some of the general principles of teaching? My experience has taught me one thing about teaching overseers and that is that about 50% of the overseers listen to reason while the other 50% you just can't get to listen to good reason, and how in the world are you going to teach a man anything if he imagines he knows it all?

I know overseers, and I believe every reader of TEXTILE WORLD knows overseers, who love to go around with a dirty look on their faces from the very moment they step into their departments and who never have a kind word for anyone. I have always found these birds hard to train as teachers. I have read a good deal about overseers being born, and not made and perhaps that is one reason why some overseers are sore at themselves and the world at large.

W. D. CRAWFORD.

Editor, Overseers' Round-Table:

I THINK that it should be one of the requirements of an overseer that he should be a good teacher and a good leader. To some this is a gift, others attain it by careful thought and study. One cannot use the same methods in teaching everyone. Some you can tell a thing to one way, and he or she

Where to Put the Boy

"JUST the other day," Superintendent Chase said as the meeting opened, "Joe Talcot, who runs the Brick mill, asked me if I would give his boy a job in the mill here. The boy was graduated from a textile school last spring and has been working at the Brick mill since that time. Joe said he thought the boy would be better off in another mill. It started me thinking, and I'd like to ask the question whether you men would want your boy where you could keep an eye on him, whether you would want him in the mill of a friend, or whether you would want him to go off and get a job somewhere where he wasn't known at all."

"I think," said Pete, "that your friend Joe Talcot made a mistake in the first place in having the boy work in the same mill. I think that he is making another mistake in trying to get the boy a job in a friend's mill. When my boy is ready to start work I want him to go out and make his own way. I'll do my best to give him an education, but after that I think that he will be far better off if he is on his own. If your boy works for you, you are either going to be lenient with him, which will create jealousy, or you are going to lean over backward and be particularly tough on him, which will make the boy think that he isn't getting a fair deal. Either way there is bound to be trouble. The situation is much the same where the boy works for a friend of yours, and there is the added possibility that you may take sides for or against the boy when some misunderstanding comes up and interfere with the discipline of your friend's mill. I think that a boy will gain far more by being on his own where every advance he makes is on his own ability. If he works for his father, or a friend, people are going to say that he is favored no matter how much ability the boy has. Let him gain self-reliance by fighting his own battles."

"All this talk," Bill retorted, "about going out in the world and making your own way is the bunk. I once heard of a college professor who told his students that if their fathers had any drag, or their girls' fathers had any drag, by all means take ad-

to Work

vantage of it. According to the professor life was too short and the chances of getting side-tracked too many for anyone to pass up help and pull this melodramatic stuff of fighting up from the bottom. I agree with the professor absolutely. I want to give my boy all the breaks possible. For a time I want him under my nose where I can give him pointers, and for a time I want him with a friend who can also help him along. No one, no matter how favored, can really get far without real ability, so I'm not worried about jealous people saying that whatever success he may have is due entirely to favoritism. After all, everyone wants his boy to get ahead and it's foolish not to give him every help. My knowledge of the business is one of the real things I have to give my boy, so why send him away where I can't help him, just because of one of those crazy ideas that is the same as throwing a baby off the dock to teach it to swim?"

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Do *you* want your boy to work in the mill with you, to work with a friend, or go off by himself and fight his own way?

Overseers and others are invited to discuss this and other questions brought up in the super's talks. Letters accepted and published will be paid for without regard to length. Brevity is desirable.

will never forget, but to others you might use the same expressions with little or no effect.

You can readily see that you cannot approach all alike. For instance: A man may make a speech which some will never forget, others may remember for a short time, and still others could not tell you anything of it two hours afterward. In order for all to understand this man he would have to make the same speech from a hundred different angles. It is the same with teaching help in industry. The overseer has to study the different traits and peculiarities of each individual to find out how to approach them. Then he can go ahead. W. W. Morrell, Roxboro Cotton Mills.

The Community Building

Editor, Overseers' Round-Table:

Looking toward the future, it seems to me that every successful manufacturer will have connected with his plant some sort of community building for his employees, and that one of the most important men in the organization will be in charge of community activities.

It is generally conceded that a certain amount of recreation is necessary to keep the average person in a normal frame of mind, and therefore enable him to concentrate upon his duties during working hours with a good will only possible to those who are in proper balance, mentally and physically.

The high price being paid for this commodity, "recreation" is absurd, and it is possible for the far-seeing manufacturer to provide it for his employees at a reasonable price, sufficient to pay operating expenses of such a building and at the same time promote a feeling among them which will pay dividends in quality merchandise and practically eliminate the problem of "turnover."

J. H. O'Neill, Eagle & Phoenix Mills.

Enforcement of Rules

Editor, Overseers' Round-Table:

Rules are made to cover certain conditions, whether these conditions are explicitly expressed or merely implied, and when conditions change it is necessary to make new rules or adjust the old one. The person whose duty it is to interpret and enforce the rules is credited with enough intelligence to know when the rules apply. However, when the person entrusted with enforcement of rules meets a condition that causes rules and logic to conflict, he should not ignore the rule, but report the fact immediately to his superior and ask for instructions.

As a general rule, regulations should be enforced even though they cause some hardship on an innocent person. It seems to be a law of life that the individual must at times make sacrifice for the good of the community, but this sacrifice should not be out of proportion to the good accomplished.

When man reaches an intellectual stage that enables him to foresee all possibilities of a situation, then it will be proper to make rules unbreakable as the laws of the Medes and Persians, but so long as man is human and subject to error, it will be necessary to apply man-made rules with a grain of "horse sense," so that we shall not violate the higher rules of logic, morality, justice and mercy when we meet unforeseen and unforeseeable events in an eternally changing universe. Lex et Jus.

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Summary of Discussion on Teaching Overseers

Of the contributions, 65% were in favor of instructing overseers in some of the general principles of teaching so that they would be better qualified to teach the workers. This group stated that, with so much depending on the ability of the overseer to instruct his workers, nothing should be overlooked which would prove of assistance to the overseer. The remaining 45% held that overseers should be selected for their ability to teach, among other things, and that real teaching ability was a gift which could not be acquired.

▸ Hosiery Association Convenes April 14

Preliminary announcement of plans for the annual convention of the National Association of Hosiery and Underwear Manufacturers, is made in the current issue of the association's "Special News-Letter." The convention will be held Thursday, April 14, at 11 a.m., in the convention room of the Commercial Museum, Philadelphia, Pa. The program of addresses to be delivered is now being arranged. The convention will be followed immediately by the annual luncheon of the association at which an attendance of more than 500 is expected.

As usual, the convention will be held simultaneously with the annual Knitting Arts Exhibition, which will open Monday, April 11, in Commercial Museum. closing, Saturday, April 15. The association reports that the success of the exhibition is "already assured by the sale of a majority of the exhibition spaces available."

▸ Plans for Committee D-13 Meeting

Tentative plans for the meeting of Committee D-13 of the American Society for Testing Materials, to be held at Providence, R. I., Thursday and Friday, Mar. 10 and 11, provide for subcommittee meetings Thursday morning and afternoon, with a luncheon at noon and banquet in the evening; and for a general session Friday morning and afternoon, with a luncheon at noon that day also.

Headquarters will be at the Biltmore Hotel. Further details will be available shortly. Program is being arranged by a local committee of arrangements, with Kenneth B. Cook as chairman.

▸ Georgia Manufacturers Will Meet in Atlanta, April 5-6

The Cotton Manufacturers Association of Georgia will hold its 32nd annual convention at the Atlanta-Biltmore Hotel, Atlanta, Ga., April 5 and 6, according to an announcement from T. M. Forbes, secretary of the organization. Approximately 150 mill executives and other visitors are expected to attend the convention which will be presided over by D. W. Anderson, general manager, Pacolet Mfg. Co., New Holland, Ga., president of the association.

▸ Styling of Dundee Towels Discloses Newest Trends

Until now, manufacturers of bathroom fixtures have always kept several jumps ahead of towel manufacturers, at least as far as styling was concerned.

Woodward, Baldwin & Co., New York, selling agents for the Georgia-Kincaid Mills, manufacturers of Dundee towels, are now ready to offer the 1932 Dundee line of towels, which is styled not only to be current with prevailing color schemes and designs, but to anticipate them by several months.

Under the direction of Mrs. D. P. Hyland, stylist of J. Ralph Corbett, Inc., merchandising consultants, surveys were made and after a careful study of consumer preferences, the entire line was restyled and fresh, new numbers added. The colors are planned to blend with bathroom fixtures and furnishings. New reversibles are offered in new colors. An attractive folder, reproducing some of the outstanding styles in full colors, has been printed and is being distributed.

▸ Cottons Improve Position During January

Statistical reports of production, shipments and sales of carded cotton cloths during the month of January 1932, made public on Monday by the Association of Cotton Textile Merchants of New York, strongly confirm optimistic predictions previously made. The figures cover a period of four weeks.

Production during January amounted to 232,707,000 yd., or at the rate of 58,177,000 yd. per week.

Improved market conditions distinguished the largest average weekly sales recorded in any month since September, 1929. Sales for January 1932 amounted to 338,010,000 yd., or 145.2% of production. Shipments during the month were substantial, amounting to 268,899,000 yd., or 115.5% of production.

A sharp reduction in stocks during the month, amounting to 12.5%, brings this total down to 254,056,000 yd., or approximately 100,000,000 yd. less than the figure reported as of the end of January, 1931.

Unfilled orders at the end of the month were 391,150,000 yd., an increase of 21.5% during the month.

"But of Course Textiles Are Different. . . . ."

What? Jewelry stores selling typewriters? Yes—sterling silver typewriters, now manufactured for graduation gifts.

Example No. 7937 that an added distribution outlet often opens up an entirely new class of business.

▸ Group of Mills to Offer Non-Run Hosiery

A group of hosiery manufacturers, led by the Apex Hosiery Co., of Philadelphia, will shortly place on the market a new type of non-run stocking, it was announced during the week by Wm. Meyer, president of Apex. Mr. Meyer, who is also president of the National Association of Hosiery & Underwear Manufacturers, has given considerable time to development of the non-run hosiery, and he said he expected the new line to bring a trade-up tendency in the hosiery industry.

The stocking will be manufactured under patent No. 1,470,490 granted some time ago by the Patent Office to Nathan Schwartz, of Newark, N. J. Details of the process and the promotional plans will be made public later, it was stated.

▸ Bureau of Census Asks Cooperation to Cut Cost of 1931 Census of Manufactures

Textile manufacturers are now being asked by the Bureau of the Census to fill out and return promptly the Census of Manufactures questionnaires which have recently been distributed by the Bureau. A special effort is being made to conduct the 1931 canvass by mail, in order to reduce the cost of the work. If all the returns can be collected by mail it will obviate the necessity of sending special agents to call on the establishments.

The questionnaires for the current census are somewhat shorter than those used for 1929. Most of the inquiries are simple, and it is believed that, as a rule, manufacturers will have little difficulty in supplying from their books the figures requested. As the census law makes it the duty of all those coming within the scope of the census to supply census data, delay in filling out the questionnaires is of no advantage.

An increasing number of manufacturers in the industry are learning the value of census statistics, and the demand is increasing for prompt publication of these figures. The chief obstacle to the early issue of preliminary statistics is the fact that some manufacturers do not realize the importance of making their returns with the minimum of delay. It is obvious that industry and commodity totals can not be published until all important manufacturers in the industries concerned have supplied the necessary data. Furthemore, the additional correspondence required not only to complete and correct the returns which are received promptly but also to urge delinquent manufacturers to make their returns, contributes an appreciable proportion of the expense of making the canvass.

▸ Favorable Outlook in Textiles Seen by Robert West

Speaking before the Danville (Va.) Chamber of Commerce, at its annual banquet, Jan. 29, Robert R. West, vice-president, Riverside & Dan River Cotton Mills, declared that he thought "the turn of the year finds a generally favorable outlook in the textile industry.

"There is a tremendous demand for

Jack Card Sounds as if He Really Means This

Editor, TEXTILE WORLD:

Hold on tight, I'm going to tell you something:

The depression ended during the week beginning Feb. 8, 1932, probably about two o'clock.

Don't ask me how I know because I can't answer. I don't dare mention the stock-market flurries of Feb. 11 and 13 because I'm writing this on Monday and anything may happen in Wall St. between now and your publication date. But I do know that the whole picture changed last week.

No charge for this information. Even if I prove to be right, you won't owe me a nickel. Of course if I'm wrong I may have to come around and try to borrow a nickel.

JACK CARD.

textile goods," Mr. West continued. "There is also a tremendous supply of goods on hand that is exerting a pressure on prices.

"Speaking in a more general sense our chief problem is to put goods in the market that are wanted and to make the price as cheap as possible. Once we find a ready market for a product, the problem of regulating production is much less formidable. In textile products it is a question not only of the survival of the fittest, but of the survival of the cheapest."

He praised the movement to regulate working schedules in line with demand for textile products and said that he regarded the step toward the regulation of production in the textile industry as "the most intelligent its leaders have taken."

▸ New York-London Abitration Service

What is described as the first comprehensive and practical commercial arbitration service between two countries has been established by the American Arbitration Association and the American Chamber of Commerce in London. Under the plan, parties to an arbitration agreement may have proceedings conducted either in New York or London, under a standardized procedure and at a scheduled, minimum cost.

▸ Clemson College Installs New Equipment

Through the cooperation of E. F. Houghton & Co., Philadelphia, Pa., the Clemson College (S. C.) Textile School recently installed a Rockwood base and short belt drive in its spinning division. This particular drive permits the use of the flat belt for short drives. The motor is pivoted so that it not only drives, but also serves as an idler, thus maintaining constant tension on the belt.

Aims to Stabilize Market by Regulating Machine Output

WITH plans for patent pools now under way in the full-fashioned hosiery industry in efforts to attain much-needed stabilization, a plan has also been advanced in the seamless hosiery field for a stabilized market through regulating output of certain patented machines. This plan has been developed by the Fidelity Machine Co., Philadelphia, whereby that company proposes the allocation of a given number of the devices controlled by its patents.

H. W. Anderson, president and general manager of the Fidelity Machine Co., commented as follows upon his company's most recent plan of merchandising knitting machines:

"While there is unfortunately apparently more than one reason for the hosiery manufacturer selling merchandise at cost or less, there remains only one answer for purchasing new equipment, and that is *to make a profit.*

"The manufacturer obtains profits in two ways through the use of new equipment: first, by making production savings and, second, by producing new styles or lines of merchandise which by every method of reasoning are entitled to a greater mark-up resulting from style demand.

"The hosiery manufacturers purchasing new equipment and merchandising properly, sustain a severe loss when their competitors purchasing new equipment in the same season, offer these latest developed style numbers on the same cost basis as staples. From the developments of last year, and offerings being made on the market even at the present time, we know how much this is being done. It can only be reasoned that such action has been taken by the mills as a result of having either unreliable cost figures, perhaps ideals based upon the employment of labor at any cost, or again, more likely, incompetent or misinformed sales executives.

"In order to protect the best interests of our hosiery manufacturing customers, we feel our obligation of meeting them at least half way by assuring them that the knitting machines which they purchase from us, will to the best of our ability produce a profit for them, not only while they are being written off, but even after that time. With this thought in mind, we have announced a limited distribution of one of our latest developed rib machines, to all of the manufacturers producing a certain range of hosiery, namely, infants'. We have analyzed to the best of our ability the distribution possibilities of this merchandise in a certain price classification where the new style, which this machine makes, belongs, and in order to protect the interests of our customers, we are limiting the number of machines that will be put out in the first year, and in the two succeeding years. In order to guard the best interests of the hosiery manufacturers, we are suggesting a participating royalty for the protection of patent rights and exclusiveness. It has been said by far abler men, that to have a plan, no matter how bad, is at least better than to have no plan at all, and feeling the need for constructive efforts in the merchandising of equipment for styled merchandise, we have submitted one, not to any hand-picked selected group, but to one branch of the industry.

"We feel that by voluntarily limiting the number of machines manufactured and installed in a given period of time based upon the ability of the market to absorb this product, sufficiently correct reasoning has been used to assure us of a group of mills having sane merchandising ideas for this business cycle. The response we have had indicates the soundness of such reasoning."

▸ Paterson Curtailment Plan Excites Broadsilk Interest

THE broadsilk industry was watching with sympathetic interest the start this week of a new curtailment program among the silk goods weavers of Paterson, N. J. The move is directed by the recently formed Silk Manufacturers' Association of America, which claims to represent 6,000 looms or more than 50% of the broadsilk industry of Paterson. Max M. Baker, executive secretary of the association, in announcing the curtailment plan, said it was prompted by general recognition among weavers of the menace of overproduction.

The sentiment for reduced output has been growing in Paterson during recent months and was particularly stimulated last week at a meeting in the offices of the Silk Association of America, in New York, at which Paulino Gerli, of E. Gerli & Co., strongly stressed the need for action to put the broadsilk industry on a more profitable basis.

Mr. Baker said that many manufacturers plan to reduce their output 30 to 70%.

He added:

"Some now running three eight-hour shifts will reduce them to four-hour shifts, operating a total of only 12 hours a day, which is 50% reduction. Others operating two eight-hour shifts daily, or 16 hours, will operate shifts of only four and five hours, and so on down the line. Every effort will be made to not reduce the number of workers, the plan being to spread the work among all who are now employed."

▸ Landman Opens N. Y. Office

G. F. Landman & Son, Otis Building, Philadelphia, worsted yarns, have opened an office in New York, located at 2 Park Ave.

NEWS about MEN

A. G. Pierce, chairman of the board of the American Woolen Co., New York, has resigned. **Wheaton Kittredge,** a director, has also resigned.

B. B. Gossett, vice-president, American Cotton Manufacturers' Association, Charlotte, N. C., and **T. M. Marchant,** president and treasurer, Victor-Monaghan Co., Greenville, S. C., are among the prominent speakers scheduled for a banquet of agricultural, commercial and industrial leaders of North and South Carolina, to be held at the Charlotte Country Club, Feb. 22.

D. L. Galbraith, president of American Textiles (Inc.), Bay City, Mich., has returned home from New York where he was operated on for appendicitis while in the city on business.

M. R. Porter, of New York, has been reelected president of the New Braunfels (Tex.) Textile Mills Inc., **Emil Fischer** has been made vice-president and **Harry Wagenfeuhr,** secretary. Directors include the officers and the following: **John H. Cunningham,** San Antonio, and **Howard Swigget,** New York. **R. S. Porter,** of New Braunfels, was made general manager, and **R. B. Vickers,** New Braunfels, treasurer. The mill formerly was known as the Planters & Merchants Mill.

W. H. May, president of the May Hosiery Mills, Inc., Burlington, N. C., accompanied by Mrs. May and son, Jack May, is on a trip which includes Bermuda, the West Indies, and the Panama Canal. They expect to be gone a month.

John E. Edgerton, president of the Lebanon (Tenn.) Woolen Mills and chairman of the board of National Association of Manufacturers, has been elected president of the Tennessee Manufacturers' Association. He will be one of the speakers at the annual meeting of the Concrete Reinforcing Steel Institute to be held March 7 and 8 at the Atlanta Biltmore Hotel.

Paul Stevens, president and treasurer of the Stevens Mfg. Co., Burlington, N. C., has been named permanent chairman of the depositors of defunct branch of the United Bank & Trust Co. at Burlington, N. C.

Col. G. Edward Buxton, president and treasurer of B. B. & R. Knight Corp., Providence, has also become president of a group of Maine textile mills which includes the following: Androscoggin Mills, Hill Mfg. Co., and Bates Mfg. Co., of Lewiston; Edwards Mfg. Co., Augusta, and York Mfg. Co., Saco

George S. Harris, of Atlanta, connected with the Hunter Mfg. & Commission Co., New York, has been elected president of the Cascade Mills, Inc., Mooresville, N. C., succeeding **T. B. Spencer.**

William S. Ryland, of Greensboro, N. C., has resigned as president of the North Carolina Bank & Trust Co., one of the largest financial institutions in the Carolinas, effective **March 18,** to accept a position as vice-president of the Hunter Mfg. & Commission Co. In his new position, Mr. Ryland will have charge of the large commission house's finances, making his headquarters in New York. Mr. Ryland was formerly connected with the State Planters Bank & Trust Co., Richmond, Va., and later served as president of the Citizens National Bank, of Raleigh, N. C., which was a unit in the consolidation that formed the North Carolina Bank & Trust Co., organized in the fall of 1929.

R. Arthur Irvine, president of Aldrich Bros. Co., Moosup, Conn., has been elected president of the Moosup Trust Co.

W. A. Crego has been reelected president and treasurer of the Roper Knitting Co., Inc., Canandaigua, N. Y. **Charles P. A. Persons** has become secretary, that office having been held by **George Baxter,** of Rochester, who has been elected vice-president.

Ernest C. T. Bick and Mrs. Bick have returned from an extensive tour through Europe. They visited Germany, France, Italy, Jugoslavia and Austria. Mr. Bick is president of Bick & Co., Inc., Reading, Pa.

R. R. Stowe has been reelected president of the Sterling Spinning Co., Belmont, N. C. **D. E. Rhyne,** vice-president; **S. P. Stowe,** secretary-treasurer. **J. W. Stowe, J. R. Ross, A. C. Lineberger** and **G. W. Stowe,** have been elected directors.

J. H. Beall, president, Lenoir Cotton Mill, and the Moore Cotton Mill Co., both of Lenoir, N. C., has been reelected president of the Bank of Lenoir. **J. C. Seagle,** president, Hudson Cotton Mfg. Co., and the Caldwell Cotton Mills Co., both of Hudson, N. C., has been reelected vice-president of the bank.

A. C. Lineberger has been elected president of the Crescent Spinning Co., Belmont, N. C.; **D E. Rhyne,** vice-president; **G. W. Stowe,** secretary-treasurer. **John M. Scott, S. P. Stowe, R. L. Stowe** and **W. B. Puett,** were elected directors.

Textile Calendar

Textile Forum, N.A.C.M., for overseers of dyeing, bleaching and cloth room, Chamber of Commerce Bldg., Boston, Mass., Mar. 10, 1932.

Committee D-13, American Society for Testing Materials, Spring Meeting, Providence, R. I., March 10-11, 1932.

Silk Association of America, Annual Meeting, 468 Fourth Avenue, New York, March 23, 1932.

Cotton Manufacturers' Association of Georgia, 32nd Annual Convention, Atlanta-Biltmore Hotel, Atlanta, Ga., April 5 and 6, 1932.

National Association of Hosiery and Underwear Manufacturers, Annual Meeting, Commercial Museum, Philadelphia, Pa., April 14, 1932.

Knitting Arts Exhibition, 28th Annual Show, Commercial Museum, Philadelphia, April 11 to 15, 1932.

North Carolina State College, Annual Textile Exhibition and Style Show, Raleigh, N. C., April 11-16, 1932.

American Cotton Manufacturers Association, annual convention, Atlanta-Biltmore Hotel, Atlanta, Ga., third week in April.

Southeastern Section of American Association of Textile Chemists and Colorists, spring meeting, Auburn, Ala., April 30, 1932.

Textile Forum, N.A.C.M., General Meeting for agents and superintendents, Chamber of Commerce Bldg., Boston, Mass., April or May, 1932. (Date is to be announced.)

Second National Cotton Week, May 16 to 21, 1932.

National Association of Woolen and Worsted Overseers, semi-annual meeting, Rocky Point, R. I., May 21, 1932.

Southern Textile Exposition, Textile Hall, Greenville, S. C., Oct. 17 to 22, 1932.

R. **R. Ray** has become vice-president of the Trenton Cotton Mills, Gastonia, N. C. Additional directors elected at the annual meeting of stockholders on Jan. 20 are **W. L. Balthis** and **C. K. Torrence.** Mr. Ray remains vice-president, and **Kay Dixon** secretary and assistant treasurer, of the Dixon Mills, Inc., Gastonia. Additional directors for this company include **W. L. Balthis** and **E. N. Pegram.**

Arthur C. Homer, treasurer of the Pilgrim Mills, Fall River, Mass., since 1922 when he succeeded **Henry F. Searles,** has resigned. Even though re-elected treasurer at the annual meeting of stockholders, Mr. Homer tendered his resignation to the board of directors. He had been with the company since 1911. **Ralph C. Perkins,** is the new treasurer; he is also treasurer and general manager of the Perkins-Strongman Corp., Putnam, Conn., cotton manufacturers. **Richard C. B. Hartley** and Mr. Perkins have replaced **William H. Beattie** and **Chas. B. Chase** as directors of Pilgrim Mills.

Charles W. Causey, secretary and treasurer, Pomona Mills, Inc., Greensboro, N. C., has been elected president of the Greensboro Country Club. **Lynn B. Williamson,** president and treasurer, E. M. Holt Plaid Mills, Burlington, N. C., and the L. Banks Holt Mfg. Co., Graham, N. C., has been elected vice-president of the club.

Herman Cone, treasurer of the Proximity Mfg. Co., has been reappointed a member of the Greensboro, N. C., World War Memorial Commission, which administers the affairs of a memorial stadium and armory.

J. A. Baugh, Jr., agent, Manville-Jenckes Co., Loray Division, Gastonia, N. C., has been elected president of the Gaston Country Club.

J. C. Cowan, Jr., who has been assistant general superintendent of the Burlington (N. C.) Mills, Inc., has been made plant manager of the Rayon Fabrics Corp. and the United Throwing Co., two units of the Burlington Mills.

Frank Hirsch, son of **Harry Hirsch,** who is head of the firm of Julius Cohen & Josephy, Toronto, wool dealers, will take the place of the late **H. V. Andrews** as resident partner in Canada.

Harold Hodgson, manager of the Lancashire Felt Co., Ltd., of Denton, Lanes, Eng., is expected in Canada in the near future to make arrangements regarding the new mill being established at Guelph, Ont., Canada.

Prof. E. W. Camp, head of the School of Textile Engineering, Alabama Polytechnic Institute, at Auburn, attended the meeting of the advisory committee of the Textile Foundation, held in New York last week. Dr. Camp will visit manufacturers to inspect equipment in textile testing laboratories.

H. H. Willis, director of the Clemson College (S. C.) Textile School, has been appointed as one of South Carolina's representatives on the committee of Five Hundred in the Southeastern Economic Council.

William S. Ryland, former president of the North Carolina Bank & Trust Co., who will be vice-president of the Hunter Mfg. & Commission Co., with headquarters in New York

Warren B. Chapin, formerly connected with "Fruit of the Loom Mills," B. B. & R. Knight Corp., Providence, R. I., has become associated with the New York office of the Pepperell Mfg. Co., in the print department. For the last three years Mr. Chapin has been in charge of the New York office of the Knight company, as sales manager and a director of the company.

Fred B. Radcliffe, of Wellington, Sears & Co., New York, has been elected president of the Arkwright Club, of New York. **Walter E. Thatcher,** from the Standard Textile Products Co., New York, has been elected treasurer.

J. A. Merriman, manager of the silk thread division of the Belding Heminway Co., New York, has resigned, as has **Miss A. M. Kennedy,** manager of the hosiery division in New York. **B. A. Thompkins,** vice-president of the Bankers Trust Co., New York, has resigned as director of the company.

E. A. Haggenmuller has resigned as district sales manager of the Mohawk Carpet Mills, Amsterdam, N. Y.

W. E. Evans, who has been acting as superintendent of the Irene Mills, Gaffney, S. C., has been appointed general superintendent in charge of operations, by Major H. C. Moore, receiver for the company.

G. Rush Spencer, who has been operating the Buffalo Mill, near Shelby, N. C., for more than a year, has accepted a position as superintendent of American Cotton Mills, Inc., Plant No. 1, Bessemer City, N. C. Mr. Spencer was formerly general superintendent of this company for several years.

Frank Allen, aged 65 years, foreman of the beaming department, Dana Warp Mills, Westbrook, Me., is retiring after 45 years service with the company. He began work in 1887 at 65 cents a day and spent 50 of it for room and board.

James H. Fraser, former superintendent at the Sawyer Mills, of the American Woolen Co., Dover, N. H., has become overseer of weaving at the Stillwater Worsted Mills, Craigsville, Va.

Obituary

Ralph Craven Hird

Ralph Craven Hird, secretary, Samuel Hird & Sons, Inc., Passaic, N. J., died recently. He is survived by his brothers, S. Ainsworth Hird, president of the company, Henry E. Hird, vice-president, and Lewis A. Hird, treasurer.

Lawrence G. Holden

Lawrence G. Holden, wool buyer for the American Woolen Co., died suddenly at Winchester, Mass., last week. He was born in 1872, attended Philadelphia Textile School and became associated with Justice Bateman & Co., Philadelphia. At one time he was with Bath Becher & Co., Chicago. In 1902 he went to Dewey Gould & Co., Boston, where he eventually was made a partner. In 1925, however, he joined the American Woolen Co. as wool buyer. He is survived by his widow and a daughter.

William Cunningham McMillan

William Cunningham McMillan, 57 years of age, cotton mill operator and member of the Talladega (Ala.) City Commission, died Feb. 10 following a brief illness. Mr. McMillan was a native of Talladega and attended Alabama Polytechnic Institute where he graduated in 1895. Surviving are three sons, James B. McMillan, instructor in the English department, University of Alabama; and Robert and Knox M. McMillan, students at Alabama Polytechnic Institute, Auburn.

George Leonard Austin

George Leonard Austin, superintendent, Alice Mfg. Co., Easley, S. C., died in a Greenville (S. C.) hospital, Feb. 13, following a sudden heart attack. Mr. Austin had been superintendent of the Alice plant for the last nine years. Prior to that he was connected with the Brandon Mill, of Greenville, for about 20 years. He is survived by his widow, Mrs. Daisy Ross Austin, five daughters and two sons.

Simpson Taylor

Simpson Taylor, age 64 years, engineer for the Pacific Mills at Columbia, S. C., for thirty years, died Feb. 4, following a long period of declining health.

NEWS about MILLS

Cotton

Avondale Mills, Eva Jane Mill, Sylacauga, Ala., have recently installed a modern lighting system. The four floors have been raised to 12 ft. candle intensity and even distribution. This required 1155-300 watt R.L.M. deflectors with cushion sockets and safe-change hangers equipped with 300 watt bowl enamel lamps.

Cord-Tex, Inc., New Orleans, La., has leased mill at 1101 South Peters St., and will occupy for cordage manufacturing plant. Operations start at an early date.

***American Printing Co.,** Fall River, Mass. Officials are studying the possibility of continuing operations in the cotton goods division. Operatives have expressed a willingness to accept a further reduction in wages if the department can be retained.

Florence Mills, Forest City, N. C., recently installed three No. 40 winders purchased from the Universal Winding Co., and modern high speed warpers, replacing old type slow-speed equipment.

Anchor Mills Co., Huntersville, N. C., is operating full day time shifts five and one half days a week, and part time night shifts.

Phenix Mills Co., King's Mountain, N. C., is operating on a full day and night schedule.

James Cotton Mills, Inc., Maiden, N. C. Ownership in the two mills, with a total of 8,400 spindles, has changed hands. Robert S. Abernathy has purchased the interests of J. A. Abernethy, Sr., president of the company, A. L. Quickel, vice-president, and James A. Abernethy, Jr., secretary-treasurer. The plant has been idle for nearly a year. The new owner's plans have not been announced.

Character Products Co., Inc., Salisbury, N. C., plans an expansion program for 1932. C. H. Deal, general manager has been in New York purchasing machinery.

Rowan Cotton Mills, Salisbury, N. C., have announced that orders are in hand to keep the plant at full working capacity for at least 14 weeks.

Stonecutter Mills Co., Spindale, N. C., is now operating over 300 of its 504 looms, the largest number in action in two years.

Green River Mfg. Co., Tuxedo, N. C. W. M. Sherard, of Hendersonville, N. C., and T. S. Watson, Spindale, N. C., have been named permanent receivers under an order signed by Judge J. H. Clement of superior court at Rutherfordton, N. C. No receivership policy has been decided upon.

Wade Mfg. Co., Wadesboro, N. C. Additional filter plant equipment is being installed by Hungerford & Terry, Inc., Clayton, N. J. The new equipment will double the company's present filtered water capacity.

**Indicates previous mention of project.*

Breslin Textile Mills, Inc., Frankford, Philadelphia, have been relieved of the equity receivership instigated Dec. 28. A plan has been approved whereby the Second National Bank, Philadelphia, will advance sufficient cash to pay general creditors 50c. on the dollar.

Warren (R. I.) Narrow Fabrics Co., Warren, R. I., now employing 75 persons, will begin operations on a full night and day schedule with 100% increase in personnel in the near future. A series of orders now on hand assures the plant of such a schedule for a year, according to Fred Haley, plant superintendent. The plant manufactures collar cloth, tape cloth and other narrow fabrics.

Appleton Co., Anderson, S. C., has replaced old type spooling and warping with eight No. 40 winders purchased from the Universal Winding Co., and modern high speed warpers.

Gluck Mills, Anderson, S. C. will build 12 four-room cottages during 1932. Materials have already been purchased, and building will proceed under the direction of the company.

Vardry Mill, Greenville, S. C., idle for several years, is being dismantled. The machinery has been sold to a dealer in Athens, Ga. The plant and about 15 employees houses are owned by Philadelphia interests.

Pendleton Mfg. Co., LaFrance, S. C., union installation of 38 more looms, making a total of 300, has hired additional help.

Lancaster (S. C.) Cotton Mills recently purchased six automatic spoolers and four high speed warpers from the Barber-Colman Co., Rockford, Ill., to replace old style spooling and warping.

Cannon Mills Co., York, S. C., has adopted a full time production schedule in all departments, and will continue on that basis for an indefinite period.

Wool

***Peerless Woolen Mills,** Rossville, Ga. Work will be started on the $100,000 addition to the plant early in March. The addition will include a large warehouse and processing plant.

Bradford Mills, of the American Woolen Co., Louisville, Ky., yarn plant, are running on a 100% basis employing 340 people.

Uxbridge Worsted Co., Inc., Lowell, Mass., has gone from a three-day week to a 24-hour schedule six days a week, employing about 350 workers.

***Cleveland (Ohio) Worsted Mills Co.,** has work under way on one-story brick, concrete and steel addition to mill at Ravenna, Ohio, estimated to cost about $40,000, with equipment. General contract recently was let to the P. L. Frank Construction Co., Ravenna.

Oregon City (Ore.) Mfg. Co. The New York office will be discontinued Feb. 29, and no more blankets or robes will be made by the company for the time being. Production will be confined to yard goods.

Manayunk (Philadelphia) Plush Manufacturing Co. Voluntary petition in bankruptcy has been filed.

H. Martin, 242 Broad St., Providence, R. I., has started a small plant for the manufacture of chenille rugs.

Pyle Rug Weaving Co., East Palestine, Ohio, plans rebuilding of portion of mill recently damaged by fire.

Portland (Ore.) Woolen Mills, Inc., plan to increase operations to full capacity about March 1, according to Charles H. Carter, general manager. At present the mill is running at about 70% capacity, working on an order for blankets for the navy.

***Greenwich Mills,** East Greenwich, R. I., awarded contract to Maguire Roofing Co., Providence, R. I., for roofing and sheet metal work for one-story plant unit now under way. O. D. Purington & Co., Providence, is general contractor. Charles T. Main, Inc., Boston, Mass., is architect and engineer.

American Woolen Co. has taken a ten year lease on an old mill on the Winooski River at Burlington, Vt., and plans to start operations as woolen yarn mill early in May. The city has granted a tax exemption for ten years and the mills will maintain an average minimum weekly payroll of $2,000 after the first year.

Oxford Woolen Mills, Ltd., is the name of a new textile firm, recently given a charter by the government of Nova Scotia, Canada. The company which will have its head office in Halifax, N. S., will carry on the business of carding, spinning, weaving and working wool, dyeing, finishing, manufacturing, dealing in, buying and selling wool, woolen goods, etc. The incorporators are, Frank M. Covert, Clyde W. Sperry and Jos. J. Powell, all of Halifax.

Knit

Suffolk Knitting Co., Lowell, Mass., recently chartered with capital of $700,000, will take over and succeed to local company of same name, with mill on Lawrence St. Paul Cohen is president and treasurer of new organization. Nathan Cohen is vice-president.

*__Acme Hosiery Mills, Inc.__, Asheboro, N. C., awarded a contract Feb. 3 to Goode Construction Co., Charlotte, N. C., for a two-story concrete mill building, 102x140 ft. Expectations indicate that the building will be finished by April 16. It is reported that a working arrangement has been made whereby the **McCrary Hosiery Mills, Inc.**, Asheboro, will occupy the new building and install full-fashioned machines which were recently purchased from the liquidated Signature Hosiery Co., Philadelphia.

*__Granite Novelty Co.__, Granite Falls, N. C., has completed installation of equipment for hosiery production in a new one-story brick building, and will begin manufacture of men's half hose at once.

Melko Hosiery Mills, Philadelphia, have taken additional space in present building to increase their finishing facilities. This is the second expansion within the last year.

Athens (Tenn.) Hosiery Mills. A night force has recently been added and officials of the company have stated that this schedule is expected to last indefinitely.

**Indicates previous mention of project.*

Charles H. Bacon Co., branch mill, at Greeneville, Tenn., is running on full time with more than 150 employees.

Nova Scotia Textiles, Ltd., Windsor, N. S., Canada, are operating on full time, employing 125 hands. During the last year the company has kept almost its entire force working steadily.

Silk

Northampton, Mass. At a meeting under the auspices of the Chamber of Commerce Feb. 13, a campaign was started to sell to residents of the city $25,000 worth of class A preferred stock in a new corporation projected as the result of the recent purchase of the Belding-Heminway Co. plant and equipment by S. Levine of New York for $70,000. The plan calls for $40,000 in class A shares, the remaining $15,000 to be taken by Levine and his associates, and in addition $20,000 in class B shares, of which $15,000 has been paid down by the purchaser and $5,000 more is to be used to buy equipment. Each share of preferred stock carries a share of common stock, which in turn carries the voting power in the concern. A voting trust is proposed to be set up for three years, with the city and Levine interests holding equal blocks of shares in the hands of three trustees, two of whom shall be Northampton men. Of a proposed board of directors of seven, five would be Northampton representatives.

A. H. Rice & Co., Pittsfield, Mass., has gone on an overtime schedule in some departments to fill increased orders for parachute cords, largely for government use.

*__Katterman & Mitchell Co.__, Paterson, N. J., with a southern plant at Stanley, N. C., and a new plant at Laurens, S. C., has purchased the **Columbus (N. C.) Cotton Mills, Inc.**, plant, 60x300 ft., surrounded by four acres of ground. Operations will be started in about 60 days and 100 workers will be used in the production of silk throwing. The mill was built in 1926. Machinery will be moved from the north to the new southern location.

General Fabrics Corp., Central Falls, R. I., which has been employing about 700 persons on a three-shift arrangement, closed on Feb. 8 until further notice.

Finishing

Apex Piece Dyeing Co., Paterson, N. J., has taken over the **Oriental Silk Printing Co.**, Paterson and Haledon, N. J., and will operate it under the name of the **Oriental Printing Division** of its organization.

Bouchard & Charvet, Inc., Paterson, N. J., are installing an Inversand zeolite water softener.

Standard Silk Dyeing Corp., Paterson, N. J., recently organized with capital of 1,000 shares of stock, no par value, will take over and succeed to the Standard Silk Dyeing Co., with local mill on Van Houten St.

Firth & Foster Co., Philadelphia. The creditors' committee, through Frederick C. Fuges, attorney, is offering the property for sale, either as a whole or in part.

TEXTILE WORLD Cotton and Wool Index Numbers

WOOL INDEX NUMBERS

Date	Wool	Tops	Yarns	Cloth	Group Aver.
July 31, 1914	100	100	100	100	100
1925					
January	215	213	211	229	221
April	219	234	230	241	235
July	216	217	216	239	227
October	216	212	212	227	220
1926					
January	215	213	211	229	221
April	181	193	198	211	202
July	173	184	189	202	193
October	178	186	193	197	192
1927					
January	178	187	190	197	191
April	177	182	184	193	188
July	180	183	183	193	188
October	185	185	189	194	190
1928					
January	194	193	186	195	192
April	199	206	198	198	199
July	204	206	203	197	200
October	197	197	203	198	199
1929					
January	199	198	201	198	199
April	187	189	198	197	195
July	169	170	188	197	188
October	164½	169	188	197	187
1930					
January	148	161	177	197	181
April	127	139	164	186	167
July	125	135	158	184	163
October	124	135	154	180	161
1931					
January	112	127	148	178	156
April	101	112	134	167	143
July	98	111	134	162	140
October	97	108	127	147	132
1932					
January	94	104	127	147	129

THE Textile World index numbers for the first month of 1932 displayed greater firmness than for some months past. Advances were scored by cotton and gray goods in cotton series, while wool, yarns and cloths in the wool group were unchanged. Small losses were registered by cotton yarns, colored goods and wool tops.

The raw cotton index at 53 for January was 3 points higher than in the previous month, and in the fourth week of January had touched 54. The gray goods monthly average also showed a three point gain, and in the fourth week of January had risen to 77, the highest level since last September. Cotton yarns fell off a point to 78, but were quite steady at this level throughout the month. The colored goods index, which had been relatively steady for many months, displayed greater weakness in January than any other index, and in the last week of the month had moved off to 109, or 3 points below the December average.

With the exception of a 2 point decline in wool tops each of the wool indexes was unchanged from the last month of 1931.

COTTON INDEX NUMBERS

Date	Cotton	Yarns	Gray Goods	Colored Goods	Aver. for Cloths	Group Average
July 31, 1914	100	100	100	100	100	100
1925						
January	192	197	195	173	184	187
April	196	194	193	180	187	188
July	197	183	185	176	181	182
October	174	189	193	178	186	186
1926						
January	167	175	177	162	170	171
April	153	163	161	155	158	159
July	149	149	151	141	146	147
October	106	141	147	144	146	143
1927						
January	107	134	140	140	140	138
April	118	136	143	142	143	140
July	143	149	156	145	151	150
October	168	176	184	169	176	176
1928						
January	151	163	166	166	166	165
April	164	160	160	165	162½	162
July	174	167	165	168	166½	167
October	157	161	162	164	163	162
1929						
January	162	166	158	169	163½	164
April	163½	164	157	173	165	165
July	149	160	149	166	158	158
October	147	160½	155	161	158	158
1930						
January	138	149	141	157	149	149
April	131	139	129	156	143	142
July	105	120	119	142	130	128
October	85	110	115	125	120	117
1931						
January	82	102	107	124	115	112
April	82	100	106	125	116	111
July	75	97	97	120	109	105
October	50	84	76	112	94	90
1932						
January	53	78	74	110	92	85

New Machinery *and* Processes

Overhead shafting made accessible by cleaner attachment

Industrial Cleaner

DEVELOPMENT of what is known as the model B, super-suction, industrial cleaner is announced by National Super Service Co., 1946 North 13th Street, Toledo, Ohio.

As shown in the accompanying illustration, the cleaner is mounted on an easy rolling chassis which also carries a large metal container that traps heavy refuse which should not be drawn into a fan or into a cloth separator bag. One of the attachments with which the cleaner is equipped provides for overhead cleaning, giving the operator a reach of 10 ft. above his head.

Colored Rubber Insulation

A METHOD of identifying its various grades of code wire by means of colored rubber insulation has been adopted by the General Electric Co., Schenectady, N. Y.

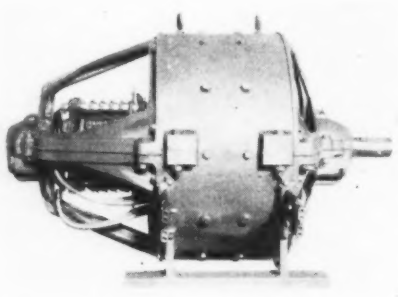
By means of this marking, it is said that the grades of wire in an installation may be identified at any time for years after the wiring system has been in use. The three grades will be marked with colored rubber insulation as follows: Code, black; intermediate, red; and 30%, green. Another feature of importance is tighter and closer braids with weather-proof finish.

Large D. C. Motors

LARGER motors for its type TDC line are announced by the Reliance Electric & Engineering Co., 1088 Ivanhoe Road, Cleveland, Ohio. The new motors range in size from 100 hp. at 800 r.p.m. to 350 hp. at 1,200 r.p.m.

A rolled-steel split-frame construction is used. There are six main poles and six commutating poles. Brackets and sleeve bearings are of split design, and there are two oil rings at the front end and three at the back of the motor.

The brush holders are said to combine the advantages of the reaction type with those of the box type, and the brush studs are made of cadmium-plated steel. The motors may be supplied for constant speed or adjustable speed service with a range of 2 to 1 or 3 to 1.



New d.c. motor supplied for either constant or adjustable speed

New recording thermometer unaffected by external temperatures

Anti-Ambi Thermometer

IMMUNITY from the effects of ambient (case and tubing) temperatures is the outstanding feature claimed for the new anti-ambi recording thermometer developed by the Foxboro Co., of Foxboro, Mass.

The new instrument is designed to give true bulb temperatures at all times irrespective of summer heat or winter cold. It is designed for use on temperature ranges up to and including 250 deg. F.

A special construction feature is found in the small bulb—a sensitive bulb as small as one inch long being employed in some cases. It is pointed out that this feature will be found useful in measuring temperatures in pipes.

Worm-Gear Reduction Unit

A RECENT addition to the series of worm gear reduction units manufactured by the Cleveland Worm and Gear Co., 3258 E. 80th St., Cleveland is designed to transmit up to about 7½ hp., the capacity depending upon the reduction ratio and worm speed. The new unit is furnished in both horizontal and

Improved speed reducing unit supplied in wide range of operating ratios

vertical types and is designated as size 70.

All shafts are mounted in anti-friction bearings, the gear-shaft mounting of the vertical type being designed so that the unit will withstand an external axial thrust downward of 2,000 lb. The worm and its shafts are made from a single nickel-alloy steel forging, and the gear is hobbed from a solid, chill-cast, nickel-bronze blank. The worm thread is of the automotive type with a high-pressure angle.

The housing of the unit is said to be exceptionally sturdy with heavy walls, internal ribs, and bolt flanges. Oil seals are fitted on each shaft extension, and standard keys are furnished with each reducer. Stock units have speed ratios varying from 4⅜ :1 to 60 :1.

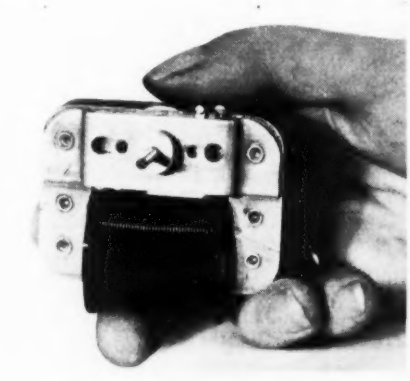
Midget Electric Motor

SMALL size, high starting torque, and ample power are the outstanding features of the new a.c. motor developed by Barber-Colman Co., Rockford, Ill. As will be seen from the accompanying illustration, the new fractional hp. motor is no larger than the palm of one's hand.

It is furnished for either uni-directional or electrically reversible rotation and is made for any voltage between 10 and 230 and for alternating current frequencies from 25 to 60 cycles. Special two-speed models of the motor can be furnished.

It is constructed of steel laminations, brass bearing plates with oilless bearings, and a squirrel-cage rotor mounted upon a hardened shaft. Coils are wound on phenolic resin spools and are impregnated to exclude moisture and insure good insulation.

These motors are designed for use in electric fans, heat regulators, unit heaters, and in other applications where high starting torque and small size are desirable.



Small motor features high starting torque and relatively high power

Manual Starter

ANNOUNCEMENT is made of the development of a new compact manual starter by Industrial Controller Division of the Square D Co., 710 S. Third Street, Milwaukee, Wis.

Compact manual starter for application to textile motors

This three-pole starter is designed to control across-the-line single and polyphase motors of 2 hp. or less. Although particularly adapted to fan, blower, pump, air compressor, machine tool, and loom installations, it is also said to be suitable for general application where remote control and low voltage protection are not essential.

Push button operation, low price, and compactness without sacrificing wiring space are claimed as the outstanding features of this instrument. Overload protection is provided by time-limit thermal relays which are front reset and require no replacement of parts after operation. Tipping of either relay opens all three lines.

Oval Tubing and Cable

TWO new additions to its line of wiring material have been made by General Electric Co., Schenectady, N. Y. These new products are known as oval tubing and oval BX cable.

Oval tubing is a thin-walled, rigid, metal raceway designed for under-plaster extension installations in walls and ceilings. It is installed by cutting a groove in the plaster, inserting and fastening the tubing, and covering it with a layer of plaster.

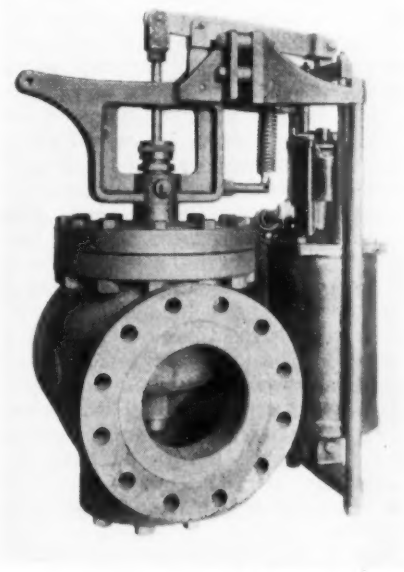
Oval tubing for under-plaster installations

The oval BX cable, as its name indicates, is oval in shape; and it is said that it is this factor which makes it particularly adaptable for all exposed or surface wiring. It is said to fit snugly around corners and projections and will fit into the plaster without the need for channeling the walls and ceilings.

Thrustor-Operated Valve

FOR the purpose of providing centralized remote control of gases or liquids under pressure, General Electric Co., Schenectady, N. Y., has developed a new thrustor-operator valve. It is available in sizes ranging from two to twelve inches and for pressures ranging from 125 to 600 lb. per square inch.

In operation, the thrustor, a self-contained power unit consisting of a motor controlling an improved hydraulic cylinder, applies pressure to the valve to open or close it. A spring is used to return the thrustor to its original position. By controlling the flow of oil from under the plunger of the thrustor, it is possible to adjust the speed with which the valve is closed or opened. It is stated that the thrustor can go to the extreme limit of its travel without overloading the motor, and therefore no overload protection is necessary. Because of the small amount of current consumed by the thrustor motor, a small relay may be used to handle the unit.



Speeds of closing and opening thruster valve is adjustable

Questions . . . *and* Answers

Uneveness in Mock-Twist Yarn

Technical Editor:

We are having difficulty in spinning 1/34s counts from a mottled roving. We do not seem to be able to get an even thread. The following layout for drafts and doublings has been employed.

Ratch at rover 6¼ in., increasing ¼ in. per operation to the four-spindle drawing box.

Machine	Ends Up	Draft
Double can	6	5.37
Two-spindle gill	4	5.5
Four-spindle drawing	4	5.5
Six-spindle drawing	4	5.75
Eight-spindle drawing	4	5.75
Finisher	3	6
Rover	2	6.25
Dandy Rover	2	6.75

4 dram roving

Weight of top = 256 drams for 40 yd.

We enclose samples of top and yarn. In the spinning we have tried the ratch at 5½ in. and also at 6 in. The black top is recombed and is put into the drawing about 48 hr. after combing. Would you please give your opinion as to what causes our trouble? (7796)

To produce a satisfactory mock-twist yarn or a double-and-twist yarn of contrasting colors, the roving must be very even, the evenness of the spirals of contrasting color being dependent upon the evenness of the roving. It is not surprising that your mock-twist yarn is uneven—a statement which is supported by an examination of the sample.

Examination of the top and layout submitted suggests the following criticisms and changes:

1. The average quality is equal to the count demanded, but the blend in the top is not suitable.

2. When stapled, the top yielded a very poor draw. The maximum staple was 6½ inches. 95% of the draw was 5 in. or less. If the other 5% had not been present the top would have been improved. The percentages mentioned were determined by careful stapling and weighing.

3. The drawing layout is not suitable for the tops submitted.

a. The drafts are too high. b. Progressive drafts should not be used for mock twists or double-and-twist yarns of contrasting colors, when difficulty is experienced in obtaining the required evenness. c. The ratches are too open, and the ratch at rover is not short enough. d. The spinning draft is too high for the average staple, considering the count required. e. The drawing drafts are excessive.

Recommendations:

1. Reduce the spinning draft to 6 or 7 at the most.

2. Reduce the drawing drafts, and do not use the highest drafts on the last two operations—namely, the rover and the dandy rover.

3. Use the finest gill boxes you have, and be sure that the front roll is set in its nearest position to the fallers. Reduce back draft to a minimum—about 1.02. Do not run any fallers with missing, broken, split, or hooked pins.

4. Set the ratches in the drawing so that at the dandy rover the staple will be about 5.5 or 5.25 inches.

5. Try the layout suggested in the accompanying table *A*. A reduction in doublings is necessary in order that drafts may be changed to a reasonable set.

6. Request the cooperation of the combing department with regard to the drafts they use on the finishers. A draft of 5.25 for this blend should be a maximum on ordinary gill boxes with 2-in. front rolls and ⅜-in. pitch screws.

7. Staple the roving carefully. If freak fibers (a few, extra long ones) are present, set the spinning ratch ignoring these.

The layout submitted cuts down the production from the heavy end and the finishers. If production must be considered, try layout *B* which is offered as a compromise. In *B* the doublings are rearranged.

Either layout will give a better yarn than the sample submitted, but the yarn produced from *A* will be more even and compact—not so lofty—than the yarn produced from *B*.

Even with these changes in the spinning and drawing drafts and the ratches it will be difficult to produce a satisfactory mock-twist yarn from the tops submitted.

Drawing Layout A

Machine	Doublings	Figured Draft	Approx. Actual Draft	Dram Weight Delivered for 40 Yds.	Inches Ratch
Can Gill.	5	5	5	256	Close
2 Sp. Gill.	4	5	5.2	205	Close
Drawing.	4	5.5	5.67	149	6.75
Weigh box	3	5.5	5.67	81.2	6.5
Drawing.	3	5.5	5.67	44.3	6.0
Finisher..	3	5.5	5.67	24.2	5.75
Reducer..	2	5.3	5.46	9.11	5.5
Rover....	2	5.3	5.46	3.45	5.25
Spinning.	1	6.4	6.7	1/34s	5.25

Drawing Layout B

Machine	Doublings	Figured Draft	Approx. Actual Draft	Dram Weight Delivered for 40 Yds.	Inches Ratch
Can Gill.	6	5	5	307	Close
2 Sp. Gill.	5	5	5.2	307	Close
Drawing.	4	5.5	5.67	223	6.75
Weigh box	3	5.5	5.67	122	6.5
Drawing.	3	5.5	5.67	66.5	6
Finisher..	2	5.5	5.67	24.2	5.75
Reducer..	2	5.3	5.46	9.11	5.5
Rover....	2	5.3	5.46	3.45	5.25

Weight of top = 256 drams for 40 yd.

▼

Mule-Spun Yarn Uneven

Technical Editor:

We are enclosing a 3½-count yarn that we are trying to manufacture on Davis & Furber 60x84-in. cards (three machines). We are spinning it on a Johnson & Bassett mule and are having lots of trouble in getting this yarn even so that we can twist it with a fine yarn as on sample herewith enclosed. Our trouble seems to lie in not getting this drawn out evenly in the spinning. Do you recommend manufacturing this weight of yarn in this way? (7790)

Assuming that 3½ count refers to 3½ cut, and believing that the card referred to is 48x60, rather than 60x84, following suggestions are offered. The blend, a mixture of wool stock and rayon waste, is entirely suitable for the production of even yarn in this count.

Locating the cause of this uneven yarn is best accomplished by the man on the job; but the following points should be checked up, remedied if necessary, and the trouble located by a process of elimination.

1. The appearance of the yarn would indicate that the spindle of the mule may need straightening, although this is not the cause of the unevenness.

2. Make the roving of the card as near 250 grains per 25 yd. as is practical. Have it at least 230 grains. This will enable from 48 to 52 in. of delivery on the mule, providing the necessary drafting to aid in securing a good even yarn.

3. Test for irregularity in the roving by twisting up single strands several yards in length. Do this on both top and bottom spools and on each side and center of the spools. This may point to the location of trouble as to whether a difference exists between side and center ends or tops and bottoms, if ring doffers are used.

It will be well to check up the following possible sources of trouble: See that spool drums are not speeded fast enough to cause a tension sufficient to produce uneven work; also that tension

between aprons is not too great or that there is drafting between wipe roll and apron. The side drawing feeding the finishers may be too large. It is better to cut it down a little and speed up the table feed. This will prevent the formation of heavy ends in center from sprung feed rolls. See that the feed on the table is neither too spread out nor so closely packed as to bunch up and that it is of proper width on the table. Neither the roving nor the yarn will be even if stock is being plucked through the feed rolls on the finishers. Watch for waste and fly on the finisher. It is much more likely the unevenness is caused by the card than the mule, as the mule tends to even up minor irregularities, provided sufficient drafting is given and a proper relation exists between the twist and the draft. The carriage should be driven out at a very good rate of speed on this work.

▼

Warp Streaks in Crepe de Chine

Technical Editor:

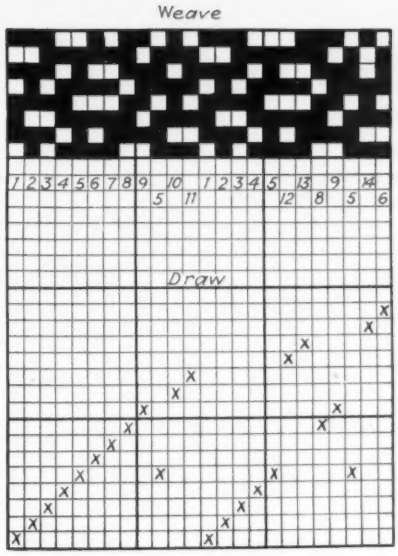
I am enclosing two samples of finished crepe de chine fabric and two samples of the gray goods. Will you kindly advise me as to the cause of warp streaks in these goods? Details of construction and processing are as follows:

Warps: 20/2 Japan 80%, 83%, 85%.
Chops: Dancing Girl, Battleships, and some Pagoda blended as owned.
Fill: 2 thd. 20/22 Japan 60/65.
Reed: 48—2 ends per heddle, 6 ends per dent.
Pick: 68 picks per inch.
Draw: Straight.
Width in Loom: 42 in.
Width Finished: 39 in.
The warp stock was dipped in soaking oil, extracted, wound on Sipp winders, warped on Sipp warpers on paper; spaced between sections, 1,200 yd. per warp. (7783)

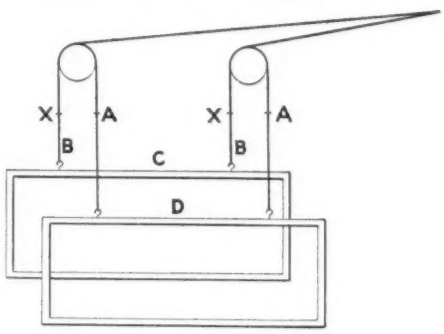
We have carefully examined the two samples of gray goods and the two of finished crepe. In going over the samples, we find that there are quite a few places that show crammed dents and also sprained dents. We also find that there are variations in denier size in the warp stock. This is probably due to improper spotting of bobbins on the creel or to the mixing of lots.

Enclosed you will find a boiled-off sample and dyed sample. You will notice on the former that there are no streaks whatever, but in the dyed sample you will find a few streaks—not, however, as pronounced as on your finished samples. This shows that you have mixed your lots in the winding or warping. This mixing of lots should always be avoided, or it will cause a streaky appearance in the warp.

We also advise you to instruct your finisher to be careful when he is using the stretching machine, as the samples show that they have been improperly stretched.



15 harness for body weave



Showing how two plain-selvage harnesses can be operated by one harness lever. A—harness strap for harness frame D; B—harness strap for harness frame C. Strap A is fastened to strap B at x and is brought around the second wooden sheave on dobby arch. As dobby lever No. 12 rises, harness C rises and harness D lowers and vice versa

Cross Drawing for 1x1 Listing

Technical Editor:

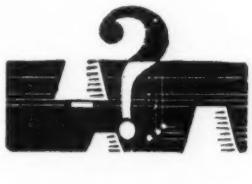
Can you help me in solving the following problem? The enclosed draft is on 24-harnesses, straight draw—40 threads extra for listing. Can you cross draw the listing on the 24 harnesses so I can get a 1x1 listing? (7805)

We do not know the number of dobby levers at your disposal; but we have reduced the draw to fifteen harnesses, less the customary two harnesses used for a plain selvage, or what is termed "listing" in the woolen trade.

If the dobby is of sixteen-harness capacity, it would be an easy matter to use the No. 12 harness lever for one of the selvage harnesses, as this thread is weaving plain all through the weave. There would then be one more harness left for the other selvage harness, making a total of sixteen harnesses to weave the pattern plus the selvages.

We enclose a sketch showing how the two plain selvage harnesses could easily be woven with one harness lever. It is a common practice in mills weaving cotton fancies to weave a plain selvage in this manner when the capacity of the dobby is limited.

Inquiries should give the fullest information possible; and if damaged material is involved, a sample should be sent. We give no consideration to anonymouse inquiries and do not undertake routine analysis of yarn or fabric, or investigation involving unusual expense.



▼

Holes in Dyed Silk Hose

Technical Editor:

We are enclosing three stockings, each one dyed a different shade. You will note that these hose contain holes, the cause of which we are unable to determine. They were returned to us by a mill whose dyeing we handle, and we cannot say how long the customer has had them. It may have been a few months. Kindly note that the holes in the stockings appear a little below the tops. We did not send you the mates to these, as they are in perfect condition.

In dyeing these stockings, they are first degummed in the best olive-oil soap, then dyed in a fresh bath, using glauber salt. We do not use acid in any form. These stockings could not pass the boarding room, pairers, folders, and then be shipped in this condition without being noticed. We shall appreciate your opinion on this matter. (7772)

It is our opinion that the holes which appear in the hosiery are caused either by rust deterioration or by burns from a floor- or window-cleaning compound containing an alkali.

High-twist tram for hosiery purposes ordinarily is soaked in a so-called crepe bath consisting of olive-oil soap and olive or neats-foot oil. This bath may develop an acidity which is imparted to the silk unless a suitable alkali is added to the bath. For high-speed production, the twist is put into the yarn on a crepe spinner. It has been common practice, until recently, to use an iron-headed bobbin. The free acid in the silk comes in contact with the metal, and the elevated temperature of the steam box used in setting the twist starts the rusting action, which is not always perceptible to the naked eye. The yarn is made into hosiery, and the rusting action or oxidization continues; and upon storage of the finished stockings, spots appear with brown edges such as shown on the samples which you submitted.

The appearance of the stocking with the hole burned through both sides in a straight line, indicates that in this case, the hole was caused by careless slopping onto the goods of an alkaline floor- or window-cleaning solution.

Let the dull sheen of Quitex Spun Rayon brighten your sales . . .

Quitex Spun Rayon opens up a virgin field for new fabrics—for new business. It differs vastly from continuous filament rayon. It makes up into distinctive fabrics, unlike any on the market, so fresh and new that they wake up the tired interest of fabric buyers.

Throw one of these fabrics over your arm. You'll see a graceful sweep of dull lustred material. Its luxurious drape, its soft, rich feel will fire your own imagination with the sales possibilities of a similar fabric in your line.

It's good merchandising to feature fabrics woven from Quitex now, while the supply of such fabrics is limited in relation to the demand. We'll gladly send samples in any twist and combination. Or, better still, one of our representatives will call at your request and talk over with you where and how Quitex is being used. Write.

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New Bedford, Mass.
Wm. M. Butler, Pres.
Edward H. Cook, Treas.
Thomas F. Glennon, Agent

QUISSETT MEANS QUALITY

Our quotations based on
Cost + a reasonable profit

Quitex Spun Rayon
by the spinners of
Quissett Cotton Yarns

TEXTILE WORLD ANALYST

Style and Quality Keynote May Lead Wool Goods Out

MANY questions, critical in their implications, will be answered by wool goods manufacturers before the end of 1932. This industry, leaderless, disorganized and competitive, faces one of the most crucial periods in its history. It is not leaderless in the sense that it lacks intelligent, aggressive foresighted thinkers. It has an abundance of such men; but, to a distressing degree, they are playing lone hands. The industry is leaderless in that it refuses to recognize and accept leadership. It clings to the traditional individualism, to price-cutting, to overproduction, to haphazard merchandising—all of which is crystallized in a sort of fear paralysis which defeats progress.

What is the solution? In an effort to answer that question, the writer made a round of key men in the market and solicited their views. The following is a composite picture of the chief problems of the industry, with suggestions for their amelioration, as offered by these trade leaders.

Let us consider first, men's suitings, the major branch of the trade and the weakest both as regards prices and promotion. The depression has seriously curtailed, not to say eliminated, style development in men's goods. Suitings are sold as a sober utility, as something men must wear for conventional and climatic reasons. During the last two years, practically no attempt has been made to sell suitings on the basis of style and appearance.

Maybe this embargo on style started with the retailer, maybe it started with the mill. No matter; the point is unimportant. What matters is that today the manufacturer of men's suitings is doing practically no style development. Style departments have been reduced, sometimes discontinued; stylists walk the streets looking for work. Meanwhile, mills offer the dullest of dull merchandise. Someone arbitrarily decides that men want herringbones—so, off they go on an overproduction of this line. And there is no style selling; there is only price selling. Price is the one-track argument of the merchandiser.

Suppose then, as a possible solution to this problem, that the National Wool Week Committee or some other organization got together the suitings weavers, the suit manufacturers, and the retailers, and proposed cooperative action? Even if the weavers did not at once respond, the question could be taken to the garment trade and to the retailers. From that point, a vertical organization might be built to support a new style emphasis.

"Further emphasis on quality in wool goods may prove the way out. Let this be the dominant note for the new season — style and quality. The depression has brought a wave of inferior goods, and it is conceivable that the tide is near the turn. Quality fabrics would help to strengthen prices, by offering a new and tangible selling argument."

Start with the mill stylist in encouraging him to offer new distinctive fabrics and push the same idea through all divisions down to the retailer. This thought was offered to the writer in the trade, and it is well worth considering. Certainly such organized effort would give the style element powerful emphasis and would put new life into suitings, supplying men with an incentive to buy clothes.

The present trend toward subordination of style in men's wear fabrics is unhealthy, to say the least. If this tendency were to be followed to its logical conclusion, the suitings weavers would finally find themselves making nothing but plain fabrics, with costs cut to the point where a man's suit could be made up to retail at $10.00. It would be a sort of Russianized production with individualism and style eliminated.

In women's wear fabrics, the problem seems to be chiefly one of trying to run a style business on a mass production basis. Demand for wool goods for women's apparel has been excellent: during the second half of 1931 more women's wear fabrics were sold than in any like period for many years past. Why then the price uncertainty? Why the lack of adequate profits? The answer is that style fabrics, necessarily short-lived in popularity, are produced with a ruinous recklessness. Manufacturers of these lines are staple goods minded, and they apply the mass production principle to style merchandise.

Wool Week's Significance

This brings us to the constructive side of the picture. Looking for promising aspects, we find plenty. National Wool Week is the outstanding example. Even as this is being written, the National Wool Week Committee is meeting in New York, in an effort to crystallize the gains of last fall's campaign and to plan further promotional effort this year. It is needless to reiterate here the splendid job performed by the National Wool Week Committee, under the able and energetic direction of Col. Chas. F. H. Johnson, its chairman. This task was performed despite grave handicaps. With wool growers on the one hand and garment manufacturers and distributors on the other, both enthusiastically supporting the drive, the wool goods group as a whole was lethargic.

Here and there weavers jumped in, and cooperated wholeheartedly, but they represented a deplorably small percentage of the industry. The prevailing attitude was one of doubt and indifference. This was put up to the weavers by the writer, and their answers throw some light on the mystery. One conspicuous point is the paradox between the attitude of the wool goods group and that of the cotton goods group. The cotton goods mills are the chief supporters of the Cotton-Textile Institute, while the wool weavers are the weakest link in wool industry promotion.

Many elements militate toward individualism among wool goods mills. Sectional feeling is strong; New England hesitates to cooperate with New York and Philadelphia, and vice versa. Then, too, there is an overabundance of de-

The merchandising discussion which appears regularly on this page considers various branches of the textile industry from week to week. It analyzes significant marketing trends or developments in those branches. While it covers current movements, its conclusions concern potential future significance of those movements, rather than the effect of temporary fluctuations in trade sentiment.

Production Losses Cost More Than Price Cutting

Expensive production delays, irregular quality, streaky dyeing—seconds—those are the things that pile up *costs* and eat away *profits.*

That's why you, as a manufacturer, *must* find yarns that are smooth-running, uniform, dependable.

That's why so many thoughtful manufacturers rely upon the mills of the Whitman Group for yarns spun to meet the most exacting requirements—yarns that cut production costs and produce salable merchandise!

Every user of Whitman Yarns benefits by the scientific manufacturing methods established by the mills of the Whitman Group.

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Mercerized Cotton

CRAMERTON MILLS
Fine Combed Cotton

TALLAPOOSA MILLS
High Quality Carded

structive criticism. The industry is ever-ready to find fault with its leaders. These are questions of temperament and most difficult to cope with; it is unfortunate that such trivialities should be allowed to interfere with activities that promise greater profits for the industry as a whole.

Cooperative Instinct Persists

Yet beneath all this can be found the instinct toward cooperation which perhaps needs only the proper leadership, to be developed into an active sentiment. The wool goods situation, so far as organized promotional effort is concerned, is far from hopeless.

We may cite the continued successful operation of the Mutual Adjustment Bureau. This unit outlived the Wool Institute and now functions as an affiliate of the American Arbitration Association. If the wool goods group is so definitely opposed to cooperation, why should the Bureau survive? In the answer to that question lies a suggested lead for those seeking true amalgamation of the industry. The chief feature of the Bureau is its mutuality; its membership comprises both buyers and sellers of wool goods. Following this cue, it would seem that an organization built on the mutuality principle might survive and do constructive work; an association, say, of wool growers and of all the intermediate divisions carrying through to the retailer.

But wool goods sentiment right now leans toward the use of existing organizations, rather than the creation of a new body. The failure of the Wool Institute has left a bad impression; many fabric manufacturers who were trade association minded, now are hesitant and skeptical. If a body, as useful and constructive as the Institute, cannot get the necessary support, why try another new organization? they ask. The immediate step, it would seem, should be to keep the mutuality idea very strongly in mind and apply it as far as is possible, in promotional effort through existing bodies.

Possibly later, the wool goods group may be ready for a new vertical fusion of interests with affiliated groups. Possibly a further weakening of prices, more acute competition, increased deficits, may develop trade consciousness. Possibly it is true, as one keen trade leader put it bluntly, that "the wool goods group has not been hit hard enough; they have not lost enough money. When they feel the pinch sufficiently, they will be forced to recognize the value of cooperative action."

One of the many windows at Filene's, Boston, decorated for National Wool Week. A typical result of industry wide promotional work

The present market position is unsatisfactory. Overcoatings mills had a poor season. Suitings sales have been hesitant and prices are very weak. Sellers are apt to force turnover at unprofitable levels. Their willingness to cut prices has been one of the worst features of the season. There is little or no resistance to bargaining pressure by buyers. The immediate outlook offers scant encouragement; prices may not show any real improvement for the remainder of the season.

Style and Quality

However, there is a trend toward better grade merchandise and mills should do all possible to develop this tendency. Further emphasis on quaity may prove the way out. Let this be the dominant note for the new season—style and quality. The depression has brought a wave of inferior goods, and it is conceivable that the tide is near the turn. Quality fabrics would help to strengthen prices, by offering a new and tangible selling argument.

The trend toward quality would be an excellent keynote for promotional effort this year. It would lend itself especially well to a wool fashion show, some event along the lines of the brilliantly successful "Golden Fleece Pageants," which were among the highlight achievements of the Wool Institute. Wool goods manufacturers are sympathetic to the fashion show idea only in so far as it does not mean spending money. They are economy-minded at present, yet oddly enough, they do not seem to appreciate that the extraordinary work done by the National Wool Week Committee last fall, was accomplished at disproportionately low cost.

The trade is skeptical about the results of National Wool Week. Those closest in touch with this event realize its value and are thoroughly sold. The bulk of the goods industry, however, cannot see gains unless these are indicated with the most obvious clearness. Much of the benefit of Wool Week was indirect, which may explain while it does not justify, the apathy of many manufacturers.

To sum up, it seems clear that the burden of cooperative promotion in the wool goods industry, for the immediate future, at least, will rest on the shoulders of a minority. The trade as a whole will enjoy the benefits, without giving the proper support. Considering the remarkable achievements of the active minority, it takes little imagination to conceive what could be done, if the industry as a whole, or a substantial majority, should get enthusiastically behind such promotional effort.

The current season, indeed, would be ideal for a trade-wide activity. The trend toward quality is showing itself in many textile groups and could be developed effectively. The new styles in women's wear fabrics are unusually important. Exploiting the Washington Bi-Centennial, mills are offering and will continue to offer a wide range of striking and attractive Colonial designs. Evening dresses of wool goods promise to be important, and many other markets invite further development.

With these promising auspices, it needs only a broader vision on the part of the fabric manufacturers, a readier acceptance of the cooperative principle, to make 1932 a significant and constructive year. However, there yet remains one obstinate problem which must be solved before permanent progress is achieved; that is the need for more complete trade statistics.

This aspect was ably presented by Prof. Davis, of the University of Pennsylvania, last week, in his address before the National Association of Wool Manufacturers in Boston. Here, again, the wool goods group is non-cooperative, and the immediate prospects for a pooling of statistics which would do much to stabilize the industry, are not encouraging.

The industry can but grope forward slowly. Success in promotional work this year might help materially toward winning manufacturers around to the wisdom of making trade figures available. That in itself is an incentive toward immediate and aggressive action.

Market Briefs

Cotton: Rises on improved sentiment in Wall Street.
Cotton Yarns: Stronger in tone but without buyers' encouragement.
Cotton Goods: Statistical change far better in January, strengthens general market.
Wool: Steady but quieter after satisfactory January.
Worsted Yarns: Buyers withhold and market is dull.
Woolen Goods: Suitings active; prices weak.
Silk: Scarcity of 20/22s strengthens prices.
Silk Yarns: Spinners cut 10c. off 60 singles prices; thrown yarns quiet.
Silk Goods: Fair buying despite garment strike.
Rayon: Increased demand from knitters.
Knit Goods: Good call for distinctively styled half-hose; women's staples steady. Fall underwear lines open. Women's sweaters active.

The acetate-viscose team that pulls together

Many of the more successful manufacturers of fancy half hose are now relying, often exclusively, on Chacelon acetate yarn knit with Sunbeam viscose yarn. These two yarns have proved, by comparative tests with others in the field, that they are a superior, profit-pulling team.

From spinning solution to packing, Chacelon and Sunbeam are adjusted to the needs of the half-hose mill. With them, knitters and fixers say they can tune in machines more quickly . . . keep them running more smoothly and with less misplating.

Even the most intricate designs come up clear and sharp when Chacelon and Sunbeam are used. They have demonstrated again and again that they are ideal half hose running mates not only for plating but also for straight knitting.

Let them produce for you the same all-round satisfactory results for which they are rapidly becoming famous.

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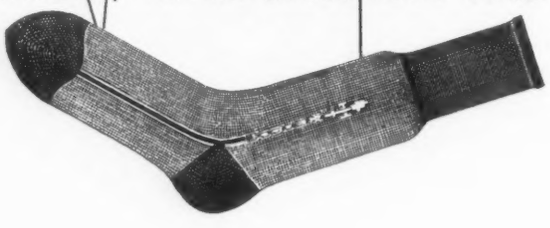

YARNS AND RAW MATERIALS

TEXTILE WORLD ANALYST

◆Cotton Yarns See Favorable Signs

GENERAL activity is still lacking in cotton yarns. Nevertheless, the situation is considered to present an improved appearance, so that dealers are feeling rather more hopeful of developments. Recent legislation by Congress has had some stimulating effect in certain quarters. Spinners especially have shown reaction in a firmer attitude on yarn prices. However, business has not yet developed sufficiently to prevent buyers from controlling the situation.

For some time yarns have been selling on a basis of 5c. cotton, and it is difficult to believe that this can continue. Cotton has maintained a firm position above this level for some weeks. Many spinners have been operating in such a way as to dispose of their products so as to keep their mills running, and their help employed during the winter months. With the advent of milder weather, it is believed there will be less tendency to avoid shut downs if it is impossible to sell yarns at a profit. The market is also approaching the period when business should improve with the spring movement of goods. Continued reports of large sales of cotton goods point to likely absence of competition of surplus weaving yarns from these mills. In quiet periods, such yarns have often been considered the worst competition because of the desire of their makers for business regardless of consequences.

Activity continues irregular. With most of the inquiry for nearby deliveries, occasionally shrewd buyers are found trying to secure supplies running four to six months ahead. Many factors will not consider such extended deliveries, but usually there is some one willing to gamble on the future.

With 10s frame spun quoted from 13 to 13½c., a sale of about 100,000 lb. of 12s is said to have been made below this level, although average quotations named were more in line with the previous figures. A sale of 24s out of stock is noted at 18c. Demand for these carded knitting yarns has been well scattered, and no volume business is noted.

Weaving yarns also have been spotty, and prices are about where they were in this market. An offer of 40,000 lb. of 20s-2 warps at 15½c. was rejected by spinners, with 16c. the best price named; on 30s-2 warps, 19½c. was paid. Mills using these yarns have not received much business lately, and, while the outlook is said to be more encouraging, they are not yet ready to operate. Certain lines of rugs have been getting business, but this is not generally true.

Combed yarns have not found much general demand. Prices remain about the same on single yarns, with 18s at 20 to 20½c. Mercerized yarns are reported in receipt of fairly satisfactory specifications as in January. There is also some new business, and it seems that the usual spring push for goods to replace depleted stocks of goods in distributors' hands is developing. Prices remain unchanged and fairly stable.

◆Cotton Rises with More Cheerful View

THE more cheerful feeling as to general business prospects promoted by the proposed credit expansion legislation in Washington, has found a reflection in cotton as well as in most other markets during the week. The first sharp advance on the Washington news was attributed chiefly to covering and was followed by moderate reactions, but offerings were absorbed by the trade, and the market firmed up again on a continuation or broadening of the demand from such quarters, and some apparent increase in commission house interest. May contracts which had sold off to 6.63 on the decline preceding the holiday, went above the 7c level on this renewal of demand, reaching the highest price touched since the early December decline to 6.25.

The trade buying reported in New York seemed to be coming in considerable amounts from abroad. At any rate there was buying attributed to houses with Liverpool, Continental, and Far Eastern connections, including a little buying for Bombay and China. In addition to this there was buying from domestic trade sources, but on the whole it seemed that there was more disposition on the part of foreign spinners to fix prices or buy against requirements than in the case of the home trade. Possibly this may have reflected a more general feeling abroad that legislative measures in Washington will react favorably upon general commodity values, although it is understood here that banking legislation either enacted or before Congress has been intended to check deflation rather than cause inflation in the strict sense of the word. It is reported that Bombay has been receiving an increased demand for cotton goods since the political disturbances led to the closing of the Shanghai mills and that many of these inquiries have been for a better character of goods than has usually been produced in the Indian mills. It is said that this has stimulated buying of American cotton by India in connection with which actual exports from the United States for the season up to Feb. 12 amounted to 89,386 bales against 26,446 last year and estimates are heard in trade circles that India may take either directly from America

(Continued on page 50)

◆Worsted Yarns Find Dull Market

QUIET continues to rule the worsted yarn market. Inquiry is at low ebb, and there are no outstanding features to break the prevailing monotony. Demand for prompt delivery yarns, which has been found in the knitting trades, has eased off somewhat, so that current volume of business has been materially reduced. The entire market is marking time pending some development which will revive interest in yarns.

Yarn prices show no change. No efforts apparently are being made to stir up interest by further concessions. With raw wool costs remaining fixed, there is really little room for prices to go lower. On the other hand, it may also be possible that spinners have finally appreciated the fact that there is little to be gained by cutting prices. Surely, there has been enough evidence of the direful effects of price slashing during the present season, in upsetting the minds of buyers and manufacturers alike. Price concessions on fabrics have certainly contributed much to the delayed business in the goods market, especially in men's wear lines, while bathing suit manufacturers have much to think over as a result of efforts to attract buyers by rashly slashing prices.

Knitting yarns are showing a decline in demand for prompt delivery. Bathing suit business is said to be developing each week, but slowly so far. Credits are being watched very carefully, and some knitting mills are delaying production as long as possible. However, these goods must be out by May or June if they are to be sold as the season opens. Knitted dresses continue to command a certain amount of attention, while jersey cloth fabrics also are still a factor, especially in New England. While prices are holding firmly as a rule, offerings of 2-20s quarter blood are noted at 70c., for dyeing only in dark colors, with light shinkage also reported. Average quotations on these yarns still run from 72½ to 75c.

Weaving yarns continue to move in scattered fashion. Specifications for men's wear mills are said to be disappointing, and in view of the lateness of the present season, the business appears to have little chance of reaching any volume. Dress goods mills in and around Philadelphia are said to be very dull, and apparently secured a very small proportion of the business placed. Some recent hurry calls for woolen yarns in 18s and 22s cut for piece-dyes in rush deliveries are noted. These goods must be out before the end of the month if there is to be any chance to catch the Easter season. Price appears to be an all-important factor in the use

YARNS AND RAW MATERIALS

TEXTILE WORLD ANALYST

of these yarns, with quotations ranging from 60 to 70c. according to grade and quality. Philadelphia spinners are said to be offering more competition on these yarns than formerly, when New England producers were getting the bulk of the business.

◆Quiet, Strong Market in Wool

THE wool situation shows little change from a week ago. Quiet confidence prevailing among dealers is unaffected by current inactivity which is viewed as the usual aftermath of any such heavy mill buying as was encountered in January. At this period of the year, with the taking over of the new clip uppermost in the mind of the trade, some slight softening of values would be an altogether normal event, but to date this had not occurred and the market continues to sell its good wools at prices that have been in force for the last three months.

A fundamental reason for the firmness in wools is probably the fact that there are no stocks of wool pressing for sale. The situation is normal in this respect with the further presumption that mill demand between now and the arrival of the new clip in volume some months hence is likely to be adequate to effect a substantial clearance of current wool stocks. Neither the wool trade nor the mills ever get down to bare boards.

The bulk of the recent buying has been in the fine territories, which wools constitute the greater part of unsold stocks. The selection available is growing poor and easier prices noted here and there are on wools which are only fair to good in quality. Fine top-making wools selling in original bags on a 50 to 52c. basis are not of the best quality and 52 to 54c. continues the asking price for wools of the Montana type. Fine graded territory is in slow call but prices are maintained firmly. The grading out of fine territory from last year's clip has been far below normal and the slow mill demand for this class of wool has been duplicated by a general neglect of the best fine fleece wools including such types as the Ohio delaine.

Delaine is suffering from unusual neglect and prices in the grease are slightly lower. There seems to be little mill demand at this time for this high grade choice wool. It is said to be less a price consideration than lack of business on suitable fabrics. Quoted 57 to 59c. clean basis it is 2c. higher than strictly staple territory wool. Little buying of consequence has been seen in medium fleeces where short supplies support strong prices.

◆Noils and Mill Wastes Show Gain

OUTLOOK continues somewhat dubious for an immediate larger movement into consumption of rags and reworks. Mills operating on cassimeres and cheap overcoatings are far from busy but, in the opinion of reworked wool manufacturers, the pressure for lower prices on clothing will force a departure from the exclusive use of virgin wool before the year is over and thus bring about more substantial purchasing of the low priced rags and recovered materials.

Business in wool wastes is showing some improvement. Following increased demand at better prices for fine noils, soft white wastes are showing improvement, better call being seen in some quarters for choice long stapled card waste and also for medium to fine lap wastes. The colored section of the market is still a dull affair, prices on all colored stuffs on the bargain counter.

The noil market is less busy but prices on the several standard grades are very firm. Noils have been selling quite freely in recent weeks, and stocks of choice noils are now quite depleted. Choice fine noils are quoted in some quarters at 38 to 40c. with choice Australian 45 to 47c. The outlook for quarter-blood noils is also showing improvement.

◆Knitters Increase Rayon Orders

AS RESULT of several weeks healthy demand for rayon underwear, these knitters have increased output and they are actively in the market for rayon yarn. Orders for knitting yarn this week were larger than those for weaving yarns though the demand at the latter end continues steady. An interesting feature is the tendency toward 100 denier in place of 150 denier.

Prices are less steady with respect to the other processes; acetate yarn, most particularly, has weakened during recent weeks and at moment of writing there were reports of drastic concessions being made by one manufacturer of acetate. The general acetate yarn situation is uncertain; prices fluctuate greatly and buyers have become so hesitant that frequently they limit contracts to day-by-day coverage.

Much interest is expressed in the effort to reach a solution of the rayon underwear weighting problem; this practice is forcing a trade-down tendency and makes for dissatisfaction among both retailers and ultimate consumers.

◆Spun Silk Prices Weaker; 60s Drop 10c.

A CUT of about 10c. in the price of imported 60s singles by foreign spinners, brought a parallel drop in the domestic prices of spun silk yarns this week. Domestic spinners complain of poor buying by their major outlets. Broadsilk mills placed only nominal business this week, despite reports of interest in shantung fabrics. It seems that the call for shantungs is limited to a few mills, demand being well below last season. Underwear manufacturers are steady customers for yarn, but their needs are small.

The spring season, normally the best time of the year for spinners, is proving a great disappointment to yarn mills; it appears unlikely that late business, even if it proves active, will compensate for the poor start.

Thrown silk has been quiet at the broadsilk end, but demand from hosiery mills is better. Knitters showed more interest this week and were placing orders as far ahead as May. Some contracts are of fair size. Throwsters look for a further drop in buying by broadsilk mills due to the Paterson curtailment plan, but they favor the plan as offering promise of a better fabric condition later.

◆Garment Strike Clouds Raw Silk

DEMAND for raw silk was uneven at the opening of the week. Broadsilk mills held back, because of uncertainty as to wether the garment strike would prove a prolonged affair and cause a let-up in fabric movement. Hosiery mills were buying steadily but in very small quantities and almost always for spot shipment. Hosiery knitters reported a good call for their own merchandise; prices of full-fashioned staples have been weak, however, and current turnover allows of a minimum margin.

Raw silk prices are stronger than last week; a rise of about 10c was noted in the 20/22s. In view of the indifferent demand, it is doubtful whether this advance will be maintained. Yokohama levels have weakened as the Japanese are anxious to realize on present stocks and are making substantial concessions.

Importers are much puzzled by the situation. The outlook is complicated by so many political, diplomatic and industrial contingencies that it is difficult to see ahead. Spring fabric manufacture has been moderately good, to date; if the strike does not prove a handicap, the beginning of March may bring good movement of spring stocks.

FABRIC MARKET REPORTS

TEXTILE WORLD ANALYST

◆ Cottons Statistically Firmer

THE statistical position of the cotton goods market as reflected in the figures issued for the month of January, has vastly improved since the first of the year. This bears out the expectancy of those who have been working for curtailment and whose strongest argument has been that a balancing of production to demand will go far to eliminate the abuse of profitless prices. In general prices are firm this week, with a rising trend where movement is accelerating. There is more confidence that current low prices will bring broad distribution and that the year holds out a hope to mills for regaining a better financial position than they had during 1931.

The print cloth market was marked last week by a slight let-up in activity and by the resale through second hands of a fair yardage at 1/8c. under first hand prices. The primary market did not weaken under this experience and prices this week are generally firmer and in some of the popular constructions advances have been made. Mills began to turn down bids of 5 3/8c. for 4-yard 80 squares for delivery in the second quarter, and the price at which transactions were current become 5 1/2c. which had previously been paid only for nearby goods.

Statistics show a gain of 21% in unfilled orders on books during the course of the four weeks of the month of January. The figure for unfilled orders is the largest of the monthly figures in two years excepting only the figure at the end of February, 1931. Stocks on hand were the lowest recorded in four years excepting only the figure for the close of August and September, 1931. Sales were the largest for any four-week month in over two years.

Sheetings have been more active in some quarters than print cloths. Prices are firm and since they sold less actively in January than print cloths, there are no supplies in second hands to be let out at under-the-market levels. There has also been good inquiry for drills. The spread of interest in these quarters confirms the broadening out of the market which has been anticipated since the first of the year. Activity in narrow print cloths centered on 27-in., 64x60s selling at 2 7/8c. Early March goods are said to be the nearest delivery date available.

Sales of fine and fancy goods were called disappointing though they were better than some weeks ago. Combed and carded lawns, organdies, pongees, etc., absorbed most of the market interest. Piques which had previously been fairly active were quieter. Among the all-rayon goods, taffetas were in most active call.

Openings of flannels for the new 1932 season were made in a number of quarters this week. Prices were said to be low and attractive to early buying.

Progress is reported from the South in the acceptance of the curtailment program and it is understood that only a small percentage of print cloth mills remain which have not taken a favorable attitude toward the policy. Feeling is growing that the probability of successful effectiveness is great. This prospect generally strengthens the market situation on a wide range of goods.

◆ Printed Silks In Firmer Position

CURTAILMENT of output of prints by mills specializing in this line of broadsilks, and early discontinuance of prints by other firms have served to improve the position of these fabrics. There is little real buying by either cutters or retailers, but stocks are so low that prices hold steady. Certain broadsilk executives, not usually over-optimistic, see the possibility of a print shortage later in spring, if there is any real demand. The garment strike in New York this week caused some hesitancy at the cutting-up end.

Canton crepes move fairly well, with prices tending downward. Stocks of plains exceed demand and the prospects for any price rallying depend entirely on March sales developments. Cutters are excessively cautious, complaining that they have difficulty in disposing of their own merchandise. Piece goods buyers report a better situation as regards over-the-counter call for yardage for home dress-making and are steady broadsilk purchasers. It could not be said that retail broadsilk sales equal last year, but they come close to it, and the market tone at this end is good.

Moderate interest in shantungs is shown; some preliminary orders for chiffons have been placed.

◆ Dark Oxfords Lead In Men's Wool Goods

WHILE women's wear fabrics continued the most active of the wool goods divisions this week, there was enough spot call for men's suitings to help movement of current stocks. Cutters of men's wear limit themselves strictly to the winter season and their orders are mostly of the small fill-in type; conservative designs are preferred, with interest centering on dark oxfords. The volume of suitings business placed has been considerable, though less than at the start of the month. Suiting prices are slightly weaker; some of the leading goods companies are accepting orders on contracts giving customers advantage of any cut that might be made when the new fall lines are announced.

The trade regards a downward revision of suitings prices for fall as practically certain, and the firms which make such a reduction retroactive to current orders are enjoying good business.

Cutters are confident of immediate outlook regarding both men's and women's apparel but those specializing in men's wear are very hesitant about novelties. The spring worsted suitings of the livelier type are inactive, and no real demand at that end is expected for some weeks. The cold weather has stimulated interest in all winter lines and the call for spring goods will be contingent upon whether March brings a mild spell. Easter is expected to help women's goods further. Men's topcoatings are in light but steady demand.

▸ Gastonia Woman's Club Continues "Wear Cotton" Campaign

More than 200 members of the Gastonia (N. C.) Woman's Club were present at a recent meeting when the following resolution, signed by Mrs. J. H. Separk, president of the club, was adopted:

"Because we live in a community dependent upon the economic status of cotton, we the members of the Gastonia Woman's Club unanimously resolve to aid in the consumption of cotton by buying and wearing cotton whenever and wherever possible during the spring and summer of 1932, and we wish to go on record as having made the above resolution."

▸ Lower Scale at Three American Woolen Mills

Beginning Feb. 8 employes in three plants of the American Woolen Co. in Providence, R. I., began work under a reduced scale of wages, which they chose in preference to lengthened hours of labor. Faced with a situation which required them to work 54 instead of 48 hours per week or accept a lower wage scale the employees preferred the latter.

The wage readjustment affects 700 employes of the National & Providence mill and those of the Weybosset Mills and Manton Worsted Mill. The latter plant is running with only a small force, but the Weybosset Mills are said to be employing several hundred hands.

KNIT GOODS MARKETS

TEXTILE WORLD ANALYST

◆Late Swimsuit Reorders Expected

THE current week brought moderate demand for swimsuits. The early February spurt has abated and contracts are chiefly from small distributors but knitters are hopeful of steady movement through March. It is accepted that duplicate business will start later than usual, and the wise companies are holding down on production to protect themselves in case of a slump. The broad outlook for the swimsuit season is uncertain enough to warrant acute caution in production. Numerous mills, not hitherto in swimsuits, are making this merchandise this year, and considering that sales to date are below normal, price prospects for late spring and early summer are not encouraging. A low stock situation would help to hold levels firm.

Women's lightweight worsted pullover sweaters sell actively, and prices continue firm. Men's sweaters are quieter. The 1932 winter sweaters opened this week but not sufficient firms had announced prices at time of going to press, to give a true indication of the average levels for the new season. Initial buying of winter sweaters has been light and the market is resigned to a slow beginning, with much of the business being delayed until nearer the actual retail season.

◆New Underwear Lines Quietly Received

THE openings of the new heavyweight lines held the center of the stage in the underwear industry this week. As previously announced, prices for 1932 merchandise are 8 to 12% below last season. Buyers showed only moderate interest in the first openings, and there was no rush to place initial business. However, knitters are reconciled to lukewarm openings these days, and this was no disappointment. The market expects that the placing of initial orders will be gradual and will be extended over some months.

Heavyweight underwear lines opened under good auspices; thanks to curtailment of output through 1931, there was little or no carry-over. Mill agents said conditions for the new season were better than at any time since the depression started. The price reduction, while anticipated, is expected to stimulate interest.

Styling is a minor aspect of the new garments. Ever since the failure of the gaily colored heavyweights two seasons ago, mills have held strictly to the conventional white and grey effects.

Heavyweight underwear manufacturers will continue their policy of producing practically against orders during 1932, in view of the success of this policy last year. The trade seems little worried regarding the trend toward lighterweight underwear; there is a growing belief that, considering the numerous firms which have withdrawn from heavyweights during recent years, the demand is sufficient to carry the industry along.

Lightweight underwear sells steadily; orders are not so plentiful as they were last week, but prices are firm and knitters regard outlook confidently.

◆Good Styling Aids Half-Hose Sales

THE healthier tone evident in the women's full-fashioned hosiery industry since the opening of the year contrasts conspicuously with the backward position of half-hose. As is usual with activity in women's apparel, the betterment of the women's hosiery market is due largely to the style element; the tendency toward higher-priced novelties has been a splendid tonic and some manufacturers of mesh and lace-top hosiery are virtually sold up to the end of March. Men's lines, however, move unevenly. There is a moderate day-by-day demand, invariably for spot shipment, and usually featuring the more conservative of the fancies.

Current half-hose numbers include some original and distinctive designs which should stimulate buying. Style has been sadly lacking in men's lines and the firm prices maintained on such pleasing new sox as are offered, indicates a strong buyer proclivity for style. One distinctive half-hose number which appeared in Worth street last week was offered in various solid shades with a single one-color vertical stripe. This number is all-rayon and retails at 35c.; a good demand is reported. The weakness of half-hose prices is due in part at least to a dearth of new lines; there is plenty of old-style distress merchandise available and mills make drastic concessions to effect turnover.

Mesh full-fashioned demand is also uneven but practically all knitters enjoy fair business. Lines retailing at $1.35 sell spiritedly. Tan shades are preferred, and orders usually are for delivery three weeks after placement. A few mills are clipping their mesh hosiery prices; quality lines, however, hold firm. Quality and originality are vital elements in mesh hosiery. Numbers possessing both attributes should sell profitably for some time.

Staple full-fashioned is in steady call. Infants' anklets are selling into April, and five-eighths hosiery also is active.

◆Raw Cotton Reports

(Continued from page 47)

or indirectly through other channels between 250,000 and 350,000 bales of American cotton this season.

The advance met increased southern selling which appeared to come partly through brokers who are frequently credited with operating for the cooperative interests, while there were also periods of realizing, probably promoted by expectations that higher prices would bring out increased spot offerings or perhaps influence acreage intentions. No fresh light has been thrown upon acreage prospects but Secretary Hyde, in his announcement of regulations governing crop production loans in 1932 under provisions of the Reconstruction Finance Corporation act, stated that the amount of each loan would be based on the acreage of specific crops to be planted by the borrower and on the requirements of individual borrowers for supplies necessary in the production of these crops. Loans for financing the planting of cotton, according to these regulations will be made on acreage not more than 65% of the acreage devoted to these crops in 1931, if the applicant planted more than ten acres of cotton last season.

The spot situation shows continued steadiness. Demand which has included some further buying for Japanese account and some buying for Bombay seemed sufficient to maintain a generally steady basis. Weather during the week permitted more progress in farm work in the Atlantic and East Gulf sections, but the soil was too wet for such operations in many sections of the Central and Northern belts.

◆Improved Cotton Waste Outlook

SENTIMENT in the cotton waste market has become more hopeful. Quotations have shown no marked change for two or three weeks, and the outlook for the next month points to increased demand for and consumption of all types of waste.

Business in spinnable materials continues relatively good and there has been a definite broadening of interest in threads and stuffing wastes. A gradual upward trend in demand for picker and fly is expected to materialize from the automobile industry as well as from furniture and bedding manufacturers, while Government reports from southern cotton centers indicate a much firmer situation in linters. Threads for machining purposes are moving in greater volume at firm prices.

◆Industrial Rayon Makes Less Profit

The financial statement of the Industrial Rayon Corp., including subsidiary, for the year ended Dec. 31, 1931, shows a net profit of $683,891, against a net profit of $1,547,529 in the preceding year. Both figures represent totals after deductions for depreciation, interest and Federal taxes. The 1931 net is equal to $4.71 a share on 144,999 shares of capital stock, while the 1930 net equaled $7.74 a share on 200,000 shares of capital stock.

In 1929 and 1928, the company reported net profit of $1,451,729 and $1,653,602 respectively.

Hiram S. Rivitz, president of the company, in his letter to stockholders, stresses the improved inventory position at the end of 1931, thanks to adoption of curtailment policy and states that the company at present operates at about 80% of capacity.

His letter adds:

"At the present time we have a good clean inventory of approximately 10 weeks' production—which is slightly above normal due to unseasonable weather during the winter months and the resultant lessening demand during that period.

"We already have installed, and there are in operation, more than 100 knitting machines and during the current year this number will be practically doubled. The Spun-Lo cloth has had a ready acceptance by the trade among well known manufacturers of underwear producing quality brands and has been the means of acquiring for our company an increasing number of substantial new accounts located in many sections of the country.

"We have just completed the installation of a small laboratory unit for the production of transparent wrapping material on an experimental basis. Our engineering and research departments are continuing their research and development work.

"There has been an increasing tendency, among a number of manufacturers using rayon yarn, to establish higher standards of quality in their products with a view of eliminating the ruinous competition which has resulted from the distribution of merchandise of doubtful quality.

"It is a source of gratification that in a year of depression, with a general tendency among corporations to reduce or omit dividends entirely, our company has been able to continue its previous dividend of $4 per share, all of which has come from net operations during the year. There was no change in the year in the established policy of thorough maintenance of plants and plant facilities and there has also been allowed for depreciation during the year the sum of $781,961.81, which is an increase of the amount allowed for the same item in 1930."

The balance sheets of the company, including subsidiary, for the last two years ended Dec. 31, compare as follows:

Assets	1931	1930
Cash	$1,055,005	$10,861
U. S. Gov. securities	650,144	3,279,445
Certificates of deposit	1,350,000	.....
Accts., notes receivable	1,327,680	688,782
Accrued interest	8,092	872
Inventories	1,634,913	1,475,393
Current assets	$6,025,834	$5,455,353
Other assets	53,374	73,755
Cleveland property	4,624,194	4,631,028
Miscellaneous advances	.....	.....
Covington property	4,931,371	4,909,177
Current assets	.....	.....
Coving. residential property	174,487	172,474
Total property	$9,730,052	$9,712,679
Less depreciation	2,475,993	2,173,694
*Total property	$7,254,059	$7,538,985
Mach., equipt. in transit	.....	120,730
Treasury stock	.....	2,971,247
Goodwill, etc	1	3,374,000
Total assets	$13,365,276	$19,534,070
Liabilities		
Accts. payable	$567,378	$667,680
Indus. fibre com. redemp.	8,152	8,160
Dividend payable	144,999	192,999
Tax reserve, etc	104,400	197,000
Current liabilities	$824,929	$1,065,839
Funded debt	230,100	273,600
Reserves	116,661	109,695
Common stock	†8,000,000	12,000,000
Paid in surplus	2,170,138	1,515,824
	$10,170,138	.....
(a) Less treas. stock	2,649,560	.....
	$7,520,578	.....
P. & L. surplus	4,673,007	4,569,112
Total liabilities	$13,365,278	$19,534,070

*Less depreciation.
†Represented by 144,999 no par shares.
(a) 55,001 shares a. cost.

Belding-Heminway Reduces Loss

A reduction in net loss is indicated in the report of the Belding Heminway Co., for the year ended Dec. 31, 1931, the net loss shrinking from $1,541,287 in 1930 to $971,700 in the year just closed.

It is announced that stockholders of Belding Heminway will hold their annual meeting in Putnam, Conn., on Tuesday, March 1, at 2 p.m.

H. R. Mallinson & Co.

The statement of H. R. Mallinson & Co., Inc., silk manufacturers, and subsidiaries, for the year ended Dec. 31, 1931, shows a net loss of $561,382 after depreciation, factoring expense, interest and other deductions, compared with a net loss of $1,456,908 in 1930.

The balance sheet of the company shows current assets of $1,159,772 and current liabilities of $616,957. Inventories have been reduced to $891,808 from $1,999,674. The balance sheet shows that merchandise was pledged to secure notes payable in the sum of $50,000. This liability was liquidated during January, 1932.

Cabot Mfg. Reports Profit

Cabot Mfg. Co., Brunswick, Me., reports for the year ended Jan. 2, last, net profit of $79,710 after depreciation, taxes and inventory write-off, which compares with net profit for the previous year of $181,653, and net profit of $349,213 in the 1929 year. After allowing for dividends totaling $150,000 paid during the year, surplus account showed a shrinkage of $70,153 to $1,291,159. The company's working capital on Jan. 2, 1932, amounted to $1,148,157, whereas a year before working capital stood at $1,191,879.

Munsingwear Reports Loss

Munsingwear, Inc., Minneapolis, Minn., and subsidiaries, report for the year ended Dec. 31, 1931, net loss of $653,628 after depreciation, interest and dividends on preferred stock of a subsidiary, compared with net profit of $475,761 in 1930. Net sales for 1931 totaled $7,054,124 against $11,780,985 in 1930. The company's balance sheet as of Dec. 31, 1931, reflects certain major adjustments made in assets accounts during the year; goodwill was written down to $2 from $3,162,132, while property account was reduced from $5,692,507 to $3,208,046. Net current assets at the close of 1931 stood at $5,701,943 whereas a year ago working capital amounted to $6,766,896.

▸New England Textile Stocks

	Sale	Bid	Asked
Am. Mfg. Co., pfd	50	45	..
Amoskeag	4	..	..
Arlington	15½	10	15
Associated Textile	10	..	10
Bates	60	9	..
Berkshire Associates, com	12½	1	2
Berkshire Associates, pfd	40½	7	..
Bigelow-Sanford, com	16	..	..
Edwards	80½	40	45
Farr Alpaca	27	15½	17½
Hamilton Woolen	50	42	46
Hill	7	2	5
Ludlow	56½	44	49
Merrimack, com	3½	3	..
Nashua, com	3½	3	6
Nashua, pfd	29	15	..
Naumkeag	50	46	50
Newmarket	5	8	11
Otis	45	35	40
Pacific	9	..	..
Pepperell	34½	33	36
Plymouth Cordage	49	47	50
West Point	35	32	..
York	8½	4	..

▸Textiles on N. Y. Exchanges

The following shows the movements of the leading textile stocks listed on the New York Stock Exchange and Curb for the week ended Feb. 16.

	High	Low	Last Sale	Net Change
Adams Millis	27	24	27	+3
American Woolen	4½	4	4½	.....
American Woolen, pfd.	25½	19	24½	+4½
Belding-Heminway	3½	2½	3	+ ½
Botany Mills, A	1	1	1	+ ½
Cannon Mills	18	17½	17½	.....
Century Ribbon	6½	5½	6½	+ ½
Collins & Aikman	9	7	8½	+1½
Consolidated Textile	½	½	½	.....
Gotham Hosiery	10½	9½	10½	+ ½
Industrial Rayon	33½	27½	33½	+5
Kayser, Julius	8½	7	8½	+1½
Mallinson	1	1	1	—
Mohawk Carpet	9½	8	9½	+1½
Pacific Mills	9½	9½	9½	+1½
*Pepperell	34	34	34	+2
*Powdrell & Alexander	16½	16½	16½	—3½
Real Silk Hosiery	3½	3½	3½	—
*Tubize	2½	1½	2½	+ ½
United Piece Dye Wks.	9	9	9	—

*Listed on Curb.

Rayon Knit Fabric Mills Lay Plans to Form Trade Association

PLANS for the formation of a trade association of firms manufacturing circular knit rayon fabrics, are in process in New York this week, as an outcome of the numerous meetings held to consider ways of solving the rayon weighting problem. The new organization for which no name has been chosen as yet, will comprise firms using rayon made by the DuPont, Glanzstoff, Industrial, Tubize and Viscose companies. The chief aim of the new body will be to promote quality rayon fabrics to offset the current dangerous trend toward inferior merchandise.

The following temporary officers for the association were chosen: I. Rogosin, Beaunit Mills, Inc., chairman; A. Grodnick, Algro Knitting Mills, treasurer; M. Berk, Argus Knitting Mills, secretary.

The following resolutions were adopted at a preliminary meeting:

1. The association is to effect its control by means of labels issued in several colors for respective quality ranges. Cloth carrying these labels is to be manufactured according to association regulations. An association representative is to be placed in every cloth mill to supervise the issuing of labels according to these regulations. These cloths are to be sold only to manufacturers who will manufacture garments according to standards set by this association.

2. Members agree to submit to the association all names of customers to whom they desire to sell goods bearing association labels, such customers to be approved by majority vote of the association.

3. Whereas the Silk Association of America, Inc., has adopted certain trade customs in dealing with their weighting problems, be it resolved that we rayon knitted cloth manufacturers follow their procedure and custom in handling this problem so far as it affects knitted rayon cloth. These customs are:

(a) When finishing materials are added to improve and enhance the quality and appearance of a fabric, such fabric shall not be considered weighted unless more than 10% of finishing materials are present.

(b) Whenever weighting materials are added, the fabric should be represented as weighted cloth.

In connection with the plan for promoting the use and sale of quality merchandise covered by its various labels, the association will shortly launch an advertising promotional campaign, featuring three groups of underwear manufacturers who will manufacture goods guided by the combined knowledge and supervision of the association and the underwear manufacturers.

The foregoing resolutions and suggestions were unanimously passed by the association which is composed of the following members:

Argus Knitting Mills, H. Gold, M. Berk; Algro Knitting Mills, A. Grodnick; Beaunit Mills, Inc., I. Rogosin, H. S. Meltzer; Janome Rayon Corp., A Kushmann, M. Wofsy; Princeton Rayons, Inc., H. Kallman, M. Doft.

▸ Knitters Want Wisconsin Labor Law Modified

Five Wisconsin hosiery concerns have requested the Wisconsin Industrial Commission to modify the State regulation forbidding employment of women after 6 p.m. Competition from southern States with either no hours for labor laws or lax enforcement of such statutes was given by representatives of the hosiery companies as the reason for their request. It is the desire of the concerns to inaugurate two shifts, from 6 a.m. to 2 p.m. and from 2 p.m. to 10 p.m. The petitioners include Phoenix and Holeproof Hosiery companies, Milwaukee; Paramount Hosiery Co., Beaver Dam and the Allen A. and Hartford Hosiery companies, Kenosha.

▸ American Woolen Reduces Loss and Cleans House

(Continued from page 20)

has carried, in its plant accounts, numerous inactive mills and a large amount of miscellaneous real estate not needed in present operations nor likely to be required for future use. Some inactive mills and miscellaneous properties have been liquidated in recent years. The book values of the active properties have been in many cases inconsistent and arbitrary figures that had relation to particular circumstances surrounding the acquisition of those specific properties, which have little relation to present day valuations.

"After careful study of the properties by the officers and outstanding engineers, Charles T. Main, Inc., of Boston, Mass., the company has taken two steps to remedy the situation. These actions in their net result substantially reduce the book value of the plants.

"The first step was the organization of the wholly-owned subsidiary, Textile Realty Co. In it was segregated for liquidation the inactive mills and miscellaneous properties. As the amount which will result from this action cannot now be determined with accuracy, only a nominal value will appear on the books of account as representing the company's ownership of Textile Realty Co. The second step was to restate the book values of the remaining plant assets so as to remove from the books inconsistent and arbitrary valuations.

"As the company was without any substantial surplus at the time these book readjustments were made, this readjustment has the effect of creating a capital deficit. This is obviously undesirable and it is proposed that it be corrected by changing the present common stock, with a par value of $100 per share, to capital stock without par value, with a stated value of $5 per share. This involves no change in the number of shares of stock held by our common stockholders and no change in the actual value of the company's assets or the stockholders proportionate ownership therein."

▸ Alexander Long, Cotton Industry Pioneer, Dies

Alexander Long, chairman of the board of Aragon-Baldwin Cotton Mills, of Charlotte, S. C., and pioneer cotton industry leader, died Wednesday in a Charlotte hospital, 24 hours after the directors of Aragon-Baldwin had re-elected him as chairman. He was 73 years old, and was considered one of the outstanding textile executives of the Carolina district. A detailed obituary will be published next week.

▸ S. R. Stager Resigns as Jonathan Ring President

Stanley R. Stager has resigned as president of Jonathan Ring & Son, Inc., woolen yarn spinners, Philadelphia. He had been president of this company for 18 years and for four years prior to that was treasurer. Mr. Stager is executive director of the Wool Yarn Jobbers' Credit Association with offices in New York.

▸ American Bemberg Moves New York Offices Tuesday

Plans for the removal next Tuesday of the New York offices of the American Bemberg Corp., from 180 Madison Ave., to 261 Fifth Ave., were practically completed this week. The new offices are at the corner of 29th St., on the 24th floor.

▸ Boston Wool Receipts

Receipts of domestic and foreign wools at Boston, also imports at Philadelphia and New York for the week ended Feb. 13, based upon data compiled by Dept. of Agriculture, follow:

	Week Ended Feb. 13	Total to Date 1932	Total to Date 1931
Domestic	2,246,000	7,798,000	4,934,000
Foreign	973,000	6,519,000	6,462,000
Total	3,219,000	14,317,000	11,396,000
IMPORTS AT PRINCIPAL PORTS			
Boston	973,000	6,519,000	6,462,000
Philadelphia	173,000	4,684,000	3,356,000
New York	433,000	4,789,000	4,684,000
Total	1,579,000	15,992,000	14,502,000

▸ Chatham Opens Pacific Coast Office

Chatham Mfg. Co., manufacturer of "Chatham" blankets, has recently established a branch office in San Francisco, under the direction of G. R. Marshall. The home office and factory of this company are located at Winston-Salem, N. C. The territory covered from the San Francisco office includes all States west of Denver.

Alfred Wolstenholme & Son Co., Inc. To Liquidate Business

At a recent meeting of the board of directors of Alfred Wolstenholme & Son Co., Inc., French worsted spinners, Philadelphia, a resolution was adopted authorizing Hollis Wolstenholme, president, to arrange for the liquidation of the business, and to sell and dispose of the machinery and equipment to the best avantage.

This action marks the passing of one of the best known factors in the French spinning industry. The company was started in 1900 by Alfred Wolstenholme, and Albert J. Clarke, as Wolstenholme & Clarke. The mill was located at Baker & Mallory Sts., Manayunk, Philadelphia. Mr. Clarke died in the spring of 1910, but the partnership was continued until Jan. 22, 1915. It was then incorporated as Alfred Wolstenholme & Son Co., Inc. In 1919, a new site of about four acres was purchased at 24th St. and Allegheny Ave. The present mill was completed in the spring of 1910 when it was first operated. Alfred Wolstenholme died June 7, 1930, and Hollis Wolstenholme, his son, was elected as president of the company.

The plant consists of a five-story and basement structure of reinforced concrete, together with a power house, and contains about 180,000 sq.ft. of floor space. The equipment consists of 28,172 French worsted spindles, with complementary and preparatory machinery including 24 combs, 26 worsted cards; 7,360 Bradford worsted spindles, with drawing; also a complete cotton processing plant of 16 cotton cards and 12 cotton combs.

January Finishing Activity

The National Association of Finishers of Textile Fabrics has issued its monthly statement of percentage of normal average capacity operated in its industry for January as follows:

	1932 January (5 Wks.)		1931 (5 Wks.)	
White and Dyed Combined	49	44%-White 56%-Dyed	49	47%-White 53%-Dyed
Fast Black	15		14	
Logwood and/or Sulphur Black	21		42	
Prints	64		65	

	1931 December (4 Wks.)		1930 (4 Wks.)	
White and Dyed Combined	42	46%-White 54%-Dyed	40	48%-White 52%-Dyed
Fast Black	16		12	
Logwood and/or Sulphur Black	15		37	
Prints	56		59	

Carpet Wool Stocks Increasing in Tientsin

The Tientsin wool market continued to be inactive during January and no improvement has been reported so far this month. Wool stocks increased and both sales and exports fell to extremely low levels according to a cable received by the Foreign Service of Agriculture from Frank Lockhart, United State Consul General at Tientsin, China. He reports that stocks of wool in Tientsin are very heavy, amounting to almost 7,000,000 lb. and unofficial reports state that stocks of carpet wools lying along the railway at interior points are growing constantly amounting to between 10,000,000 and 12,000,000 lb. It is reported that since the Chinese New Year on Feb. 6, wool prices have declined still further and Sining wools in the grease, cost and freight, New York and Philadelphia, were being quoted at around 9½ to 10c. a pound.

Cohn Hall Marx Enlarges Boston Office

To serve its accounts in New England more promptly and efficiently, the Cohn Hall Marx Co., silk manufacturers, have leased larger quarters in the Whitman Building, Boston, Mass. Complete sample lines of silks, cottons, rayons, percales, shirtings, and drapery fabrics in plain colors and prints, will be shown there. The following representatives will have headquarters at that office: Charles Dolan, Fred J. Keller, Walter S. McCoull, Cy Solomon, Emanuel Steer and Robert Watts.

Tracey & Bradley Remove to New Offices

Tracey & Bradley, handling cotton and novelty yarns, have removed their offices and warehouse from 217 Chestnut St., to Rooms 514-15 Bailey Warehouse, S.W. Cor. Delaware Ave. and South street, Philadelphia. They are the selling agents in that territory for the Fitchburg (Mass.) Yarn Co., on Sase yarns, and the Union Wadding Co., Pawtucket, R. I., on cotton bats and wadding.

Lee Kirner, Inc., Moves Back to Former Location

Lee Kirner, Inc., cotton yarns, New York, has removed from its 25th Street location to 40 East 22d Street, where it was located prior to two years ago. Mr. Kirner is convinced that yarns have hit bottom and finds growing confidence among buyers. The firm includes Lee, William F. and Alfred J. Kirner.

G. S. Jefferson Joins Howland, Croft Salesforce

George S. Jefferson formerly connected with Alfred Wolstenholme & Son, Philadelphia, has been added to the salesforce of Howland, Croft & Sons Co., operators of Linden Worsted Mills, Camden, N. J., fine worsted knitting and weaving yarns.

J. T. Miller, Utica, N. Y. Representative for Muller

L. P. Muller & Co., cotton yarns, Philadelphia, Pa., announce that James T. Miller has been appointed sales representative covering the Utica, N. Y., district, with headquarters in Utica.

Business News

Dr. Dale S. Chamberlin Joins National Oil Products

Dale S. Chamberlin, B.Ch.E., M.S., D.I.C., has joined the research staff of National Oil Products Co., Harrison, N. J.

Dr. Chamberlin was graduated from University of Michigan in 1912. After a year with Corn Products Refining Co., he went to Bethlehem, Pa., as chemist for the Lehigh Coke Co. He later taught at Lehigh University, and for two seasons lectured at Imperial College, Science and Technology, London. Dr. Chamberlin continued his work in 1929 in the capacity of technical director for R. K. Laros Silk Co. At this time he published articles on hosiery, hosiery yarns, and rayon. He is the designer, builder, and operator of a plant for recovering oil from bone, and for the manufacture of bone carbon and Dippel's Oil.

Blaw-Knox Co. Enters Dust Collector Field

Blaw-Knox Co. announces the appointment of M. I. Dorfan as manager of its dust collector division. Mr. Dorfan has just terminated a five-year engagement as manager of the dust collector division of the Pangborn Corp., Hagerstown, Md. He was previously in charge of dust collector sales for the Allis-Chalmers Mfg. Co., Milwaukee, Wis. The Blaw-Knox Co., after long experiment and research, is entering the dust collector field with two lines of equipment developed and ready for the market and other lines in process of development.

D. L. McCubbin now Manager of Ryerson Cincinnati Plant

Donald L. McCubbin, assistant manager, has been appointed manager of the Cincinnati plant of Joseph T. Ryerson & Son, Inc., effective Feb. 1. Mr. McCubbin went to this position after nine years at the Ryerson Chicago plant and more than seven years with the Cincinnati plant. Lewis E. Skinner returns to the Chicago sales organization to take over a special sales department.

Synthane Corp. Appoints Southern Representative

Synthane Corp., Oaks, Pa., manufacturer of Synthane laminated Bakelite, sheets, rods, tubes, fabricated parts and stabilized gears, has appointed H. Douglas Stier, 101 Marietta St., Atlanta, Ga., as sales representative. He will cover the territory of Georgia and Alabama. Synthane Corp. maintains representatives in 12 other cities.

Dr. Curt Obermaier Arrives

Dr. Curt Obermaier, of Obermaier & Co., Neustadt, Germany, arrived recently to put new developments in his line of pressure dyeing machinery on the American market. While here he will make his headquarters with E. A. Stienan, president of the American Obermaier Corp., Long Island City, N. Y.

QUOTATIONS

at close of business, Feb. 17, 1932
Prices cover average qualities unless otherwise stated

Cotton Goods

	Feb. 17	Feb. 9	Feb. 18 1931
PRINT CLOTHS			
27 -in., 64x60, 7.60	2¼c.	2¼c.	3¼c.
38½-in., 64x60, 5.35	3¼c.	3¼c.	5½c.
39 -in., 68x72, 4.75	4¼–4½c.	4¼–4½c.	6¼–6½c.
39 -in., 72x76, 4.25	5¼c.	5¼–5½c.	6¾–7c.
39 -in., 80x80, 4.00	5¼–5¾c.	5¼–5¾c.	7¼–7¼c.
BROWN SHEETINGS			
36-in., 56x60, 4.00	4¼–4¾c.	4¼–4¾c.	5¾c.
36-in., 48x48, 3.00	4¼c.	4¼– 5 c.	6¼c.
37-in., 48x48, 4.00	4–4¼c.	4¾c.	5–5¼c.
PAJAMA CHECKS			
36½-in., 72x80, 4.70	4¾c.	4¾c.	6c.
36 -in., 64x60, 5.75	4¼c.	4¼c.	5c
MISCELLANEOUS			
Drills, 37-in., 3 yd..	4¾c	4¼c.	6¾c.
Denims, 2.20	9¼c.	9¼c.	11¼c.
Tickings, 8 oz.	12 c.	12 c.	15 c.
Standard prints	6¼c.	6¼c.	7¼c.
Eastern staple ginghams, 27-in.	6 c.	6 c.	8 c.

Cotton Waste

Peeler comber	5¾ – 6¼
Peeler strips	5 – 5¾
Sak. comber	4¾ – 5
Choice willowed fly	2¾ – 2¾
Choice willowed picker	2 – 3
Sak strips	6 – 7
Linters (mill run	2 – 2¾
White spooler (single)	4¼ – 4¾

Cotton Yarn

CARDED (Average Quality)
Double Carded 2c.—4c., higher according to quality

SINGLE SKEINS OR TUBES (Warp Twist)

4s to 8s	$0.12½	22s	$0.16
10s	– .13	24s	– .17
12s	– .13½	26s	– .18
16s	– .14½	30s	– .19
20s	– .15	40s ex. qual.	– .28

TWO-PLY SKEINS AND TUBES

8s-2	$0.13	26s-2	$0.18
10s-2	– .13½	30s-2	19– .19½
12s-2	– .14	36s-2	– .25
14s-2	– .14½	40s-2	– .26
16s-2	– .15	40s-hi.brk.	– .28
20s-2	15 – .16	50s-2	– .33
24s-2	– .17	60s-2	– .36

SINGLE WARPS

10s	$0.13	24s	$0.17
12s	– .13½	26s	– .18
14s	– .13½	30s	– .19½
16s	– .14	40s. ex.qual.	– .28
20s	15 – .15½		

TWO-PLY WARPS

8s-2	$0.13	24s-2	$0.17 –0.17½
10s-2	.13½	26s-2	.18 – .18½
12s-2	.14	30s-2	.19 – .20
14s-2	.14½	40s-2 ordin.	– .26
16s-2	.15	50s-2	– .33
20s-2	.15½– .16	60s-2	– .36

8s-2 and 4-ply skeins and tubes; tinged, 11½; white, 12½; waste, 11

HOSIERY CONES (Frame Spun)

8s	$0.12½	22s	$0.16 –0.16½
10s	– .13	24s	– .17
12s	– .13½	26s	.18
14s	– .14	30s tying	18½– .19
16s	– .14½	30s reg.	.20 – .20½
18s	– .15	30s ex.qual.	.21 – .22
20s	15½– .16	40s	– .26

COMBED PEELER (Average Quality)

TWO-PLY—(Knitting Twist) Cones

20s-2	$0.25	60s-2	$0.38 – .39
30s-2	– .26	70s-2	– .50
36s-2	– .29	80s-2	– .60
40s-2	– .30	90s-2	– .85
50s-2	.32 – .35	100s-2	.95 –1.03

WARPS, SKEINS AND CONES

TWO-PLY—(Warp Twist)

20s-2	$0.25	60s-2	$0.38 –0.40
30s-2	– .27	70s-2	.50 – .52
36s-2	– .30	80s-2	.60 – .62
40s-2	.31 – .32	90s-2	.85 – .90
50s-2	.33 – .35	100s-2	.95 –1.02

SINGLES

12s	$0.18½	30s	$0.26
14s	– .19	38s	.28½– .29
16s	– .19½	40s	.29 – .30
18s	.20 – .20½	50s	– .32
20s	– .21	60s	.38 – .40
24s	– .23	70s	.50 – .52
28s	– .25	80s	.60 – .63

MERCERIZED CONES—(Combed, Ungassed)

26s-2	$0.36½ 0.38½	90s-2	$0.90
30s-2	.38 – .40	100s-2	1.15–1.25
36s-2	.40 – .42	120s-2	1.50–1.60
40s-2	.42 – .44	30s	.51– .52
45s-2	.42½– .44½	40s	– .56
50s-2	.45 – .47	50s	.61– .64
60s-2	.50 – .52	60s	.70– .73
70s-2	.64 – .66	70s	.80– .83
80s-2	.73 – .75	80s	.92– .96

Cotton Prices and Statistics

COTTON STATISTICAL DATA
(Fluctuations of Futures)

	Closed Feb. 10	For Week—High	For Week—Low	Closed Feb. 17	Net Ch'ge
February	6.39	6.81	6.39	6.73	+0.34
March	6.46	6.81	6.44	6.77	+0.31
April	6.54	6.89	6.54	6.85	+0.31
May	6.64	7.00	6.63	6.96	+0.32
June	6.71	7.07	6.71	7.03	+0.32
July	6.80	7.17	6.79	7.13	+0.33
August	6.87	7.24	6.87	7.20	+0.33
September	6.94	7.32	6.94	7.27	+0.33
October	7.02	7.40	7.01	7.37	+0.35
November	7.09	7.48	7.09	7.44	+0.35
December	7.17	7.55	7.18	7.54	+0.37
January	7.25	7.64	7.23	7.61	+0.36

SPOT FLUCTUATIONS FOR WEEK
(Middling)

	New York	New Orleans	Liverpool
Wednesday, Feb. 10	6.55	6.41	5.55
Thursday, Feb. 11	6.70	6.56	5.51
Friday, Feb. 12	Holiday	Holiday	....
Saturday, Feb. 13	6.85	6.70	5.72
Monday, Feb. 15	6.85	6.67	5.73
Tuesday, Feb. 16	6.95	6.76	5.73
Wednesday, Feb. 17	6.90	6.72	5.82

FOREIGN COTTONS
Egyptian Cotton

Alexandria Exchange, Feb. 16.		Change
Mar. Sak	13.50	—0.10
Feb. Uppers	11.17	+0.20
Feb.-Mar. Shipment c. i. f. Boston (Tariff not included)		
Fully good fair Sak (No. 38)		12.75
Fully good fair to good Uppers (No. 10)		10.60

(By Anderson, Clayton & Co.)

Foreign cottons	F. O. B. New York, Cents
Peruvian Tanguis Strict Middling	17½
Peruvian Pima No. 1	16
Peruvian Moderate Rough	12
Peruvian Full Rough	17
China Tientsin No. 1	10
India Rough	7 to10
India Smooth	6½ to 7½

(By Bruns-Nordeman Co.)

MOVEMENT INTO SIGHT

	This Year	Last Year
Week	315,000	143,000
Season	12,180,000	11,210,000

WORLD VISIBLE SUPPLY

	Feb. 12	One Year Ago
Interior towns and ports of U.S.*	6,908,000	5,567,000
Afloat to and at ports of Europe	1,460,000	1,861,000
Afloat to and at ports of Orient	989,000	355,000
Total	9,357,000	7,783,000
	Increase	Decrease
Change during week	26,000	86,000

*Includes afloat to New York.

FORWARDINGS TO MILLS OF WORLD

	This Year—Week	This Year—Season	Last Year—Week	Last Year—Season
No. States, U.S.	21,000	509,000	21,000	522 000
So. States, U.S.	82,000	2,939,000	66,000	2,510,000
Total U.S.	103,000	3,448,000	87,000	3,032,000
Great Britain	30,000	687,000	17,000	500,000
Continent	95,000	1,955,000	61,000	2,051,000
Orient	50,000	1,787,000	61,000	746,000
Canada and other America	4,000	113,000	3,000	135,000
Total Foreign Countries	179,000	4,542,000	142,000	3,432,000
World total	282,000	7,990,000	229,000	6,464,000

EXPORTS FROM UNITED STATES

Total	200,000	5,360,000	94,000	4,674,000

AVERAGE PRICE FEB.-MAR., SHIPMENT
HARD WESTERN COTTON
F.o.b. New England

	Middling	St. Middling
1 —in	8½– 8¾c.	8¾– 9¼c.
1⅛-in	9 – 9½c.	9½–10c.
1 —in	10 –10½c.	10¾–11¼c.
1¼-in	12½–13½c.	13½–14½c.

Basis on New York, March, 6.99.

SPOT FLUCTUATIONS AND STOCKS

Markets	Feb. 9	Feb. 17	Sales	This Week	Last Year
Galveston	6.50	6.75	2,826	932,932	616,753
New Orleans	Holiday	6.72	10,416	1,112,617	771,931
Mobile	6.15	6.40	3,899	233,227	215,137
Savannah	6.46	6.76	2,216	293,698	341,459
Norfolk	6.56	6.85	696	67,855	93,633
New York	6.65	6.90	2,900	208,305	228,579
Augusta	6.38	6.69	1,348	130,356	111,254
Memphis	5.85	6.10	39,399	467,656	344,720
St. Louis	6.30	6.50	....	....	16,797
Houston	6.45	6.70	20,305	1,557,507	1,388,603
Dallas	6.00	6.30	40,031	36,548	18,202

DIFFERENCES ON AND OFF MIDDLING WHITE GRADES

	Dallas	Memphis	Montgomery	Augusta	Average
M.F	0.65†	.75†	0.75†	0.75†	0.72†
S.G.M	.50†	.50†	.65†	.63†	.57†
G.M	.40†	.40†	.45†	.44†	.42†
S.M	.25†	.25†	.25†	.25†	.25†
S.L.M	.25*	.20*	.25*	.25*	.25*
L.M	.50*	.50*	.55*	.50*	.53*
S.G.O.**	.75*	.75*	.90*	.88*	.83*
G.O	1.00*	1.00*	1.25*	1.25*	1.14*
YELLOW TINGED					
G.M	0.30*	0.25*	0.30*	0.31*	0.28*
S.M	.45*	.40*	.45*	.44*	.43*
M.**	.65*	.50*	.65*	.50*	.60*
S.L.M	1.00*	.90*	1.00*	.88*	.95*
L.M	1.35*	1.40*	1.35*	1.25*	1.37*
YELLOW STAINED					
G.M	0.65*	0.60*	0.65*	0.50*	0.61*
S.M.**	.90*	1.10*	.90*	.75*	.94*
M.**	1.35*	1.35*	1.35*	1.25*	1.37*
BLUE STAINED					
G.M.**	0.65*	0.35*	0.65*	0.50*	0.60*
S.M.**	1.00*	.85*	1.00*	.88*	.98*
M.**	1.35*	1.10*	1.35*	1.25*	1.34*

**Grades not deliverable on contract.
*Off Middling. † n Middling

Wool

OHIO, PENNSYLVANIA AND WEST VIRGINIA (IN GREASE)

Fine delne.	$0.23 –$0.24	¾ blood	$0.23 –0.24
Fine clthg.	.20 – .21	¼ blood	.21 – .22
½ blood	.23 – .24		

TEXAS AND CALIFORNIA (CLEAN BASIS)

Texas, 12 months	$0.54 –0.56
California, Northern	.46 – .48

PULLED—EASTERN (CLEAN BASIS)

AA	$0.58 –$0.60	B-Super	$0.43 –0.45
A-Super	.48 – .50	C-Super	.38 – .42

MONTANA, IDAHO AND WYOMING (CLEAN BASIS)

Staple fine	$0.55 –0.57
Staple ¾ bld.	.53 – .55
Fine and fine medium	.52 – .55
½ blood	.48 – .50
¼ blood	.41 – .43

MOHAIR—DOMESTIC

Best carding	$0.23 –0.28
Best combing	.31 – .33

MOHAIR FOREIGN (IN BOND)

Turkey fair, average	$0.17 –0.21
Cape firsts	.18 – .21

FOREIGN CLOTHING AND COMBING (CLEAN BASIS IN BOND)

Australia:	
70s	$0.40 –0.42
64s	.31 – .33
58s-60s	.28 – .30

(IN GREASE)

Montevideo:	
58s-60s	$0.17 –0.18
56s	.16 – .17
50s	.15 – .16
Buenos Aires:	
4s, 40-44s	$0.10 –0.11
5s, 36-40s	.09 – .10

FOREIGN CARPET (GREASE BASIS IN BOND)

Aleppo washed	$0.19 –0.20
China: Combing No. 1	.12 – .13
China Filling Fleece	.11 – .12
Szechuen ass't	.12 – .13
Cordova	.09 – .10
Scotch black face (nominal)	.14 – .16
East India: Kandahar	.15 – .16
Vicun'r	.19 – .20
Joria	.19 – .20

Worsted Yarns

ENGLISH SYSTEM WEAVING

2-20s 36s	$0.75
2-24s 40s	– .80
2-26s 44s	.82½– .85
2-28s 46s	– .87½
2-30s 48s	.92½– .95
2-32s 50s	.97½–1.00
2-30s 64s fancy mixes	1.25 –1.27½

(Single yarns 5c. less than above)

2-36s 58s	1.05
2-40s, 60s	–1.20
2-40s, 64s	1.27½–1.32½
2-50s, 66s	1.40 –1.45
2-60s, 70s	1.82½–1.85

ENGLISH SYSTEM KNITTING

2-20s, 44s in oil	$0.70 – .72½
2-20s, 48s in oil	.72½
2-20s, 50s in oil	– .75
2-20s, 56s in oil	.92½– .95
2-20s, 60s in oil	–1.00
2-20s, 64s in oil	1.12½–1.15
1-18s, 48s dyed	.87½– .90
1-18s, 50s dyed	.90 – .92½

(Oil yarns 17½c. less)

FRENCH SYSTEM

1-20s, 58s	.97½–1.00
1-20s, 60s	1.02½–1.05
1-18s, 64s, dyed	1.25 –1.27½
1-26s, 64s	1.05 –1.07½
1-30s, 66s, Warp	1.12½–1.15
1-30s, 64s, Warp	1.15 –1.17½
2-30s, 64s, Fancy mixes	1.32½–1.35
2-40s, 64s, Zephyrs	1.25 –1.27½
1-50s, 66s	1.42½–1.47½
2-50s, 66s	1.40 –1.45
1-60s, 70s	1.75 –1.80
2-60s, 70s	1.90 –1.95

FRENCH SPUN MERINO WHITE

1-30s, 50-50-58s on cops	$0.90 – .95
1-40s, 50-50-60s on cops	1.00 –1.02½
1-40s, 50-50-64s on cops	1.02½–1.05
1-40s, 50-50-64s Australian cops	1.10 –1.15

Underwear mixes, 3 to 5c. Solid color, 35c. additional.

New York Top Futures

	Closed Feb. 9	For Week High	For Week Low	Closed Feb. 16	Net Ch'ge
February	67.50	68.00	67.50	68.00	+0.50
March	68.10	68.50	68.10	68.40	+0.30
April	68.30	68.50	68.20	68.40	+0.10
May	68.30	68.50	68.30	68.40	+0.10
June	68.50	68.50	68.10	68.40	—0.10
July	68.40	68.50	68.40	68.50	+0.10
August	68.50	68.50	68.50	68.50	.....
September	68.50	68.50	68.50	68.50	.....
October	68.50	68.50	68.50	68.50	.....
November	68.50	68.70	68.50	68.50	.....
December	68.50	68.70	68.50	68.50	.....
January	68.50	69.00	68.50	69.00	+0.50

Tops and Noils

TOPS—BOSTON

Fine (64-66s)	$0.77 –0.78
Half-blood (60-62s)	.70 – .73
High ¾ blood (58s)	.66 – .68
Aver. ¾ blood (56s)	.60 – .62
Low ¾ blood	.57 – .58
High ¼ blood (50s)	.51 – .53
46s S. A. and N. Z.	.55 – .57
44s S. A. and N. Z.	.50 – .52
40s S. A. and N. Z.	.46 – .48

TOPS — BRADFORD, ENG. (FEB. 12)

Fine (70s)	25½d	¾ bld. (56s)	18 d
Fine (64s)	23½d	½ bld. (50s)	13½d
½ bld. (60s)	22½d	Cross-bred (46s)	10 d

NOILS — BOSTON

Fine	$0.35 –$0.38	High ¼ bld.	$0.27 –$0.28
Half-bld.	.32 – .35	Low noils	.21 – .23
Aver. ¾ bld.	.28 – .30	Medium colored	.18 – 20
Fine colored	.23 – .28		

Wool Substitutes

WOOL WASTE

Lap, fine white	$0.60 – .62
Lap, fine colored	.38 – .40
Hard ends, fine white	.42 – .46
Hard ends, ¼ blood white	.31 – .33
Hard ends, fine colred	.18 – .20
Hard ends, medium colored	.13 – .15
Card, fine white	.23 – .25
Burr, fine carbonized	.24 – .26

OLD WOOLEN RAGS (GRADED FOR MFRS.)

Merinos, coarse light	$0.04½–0.05
Merinos, fine dark	.02½– .03
Merinos, fine light	.08½– .09½
Serges, blue	.04½– .05
Serges, black	.04½– .05½
Serges, red	.07½– .08
Knit, white	.22 – .23
Knit, red	.08 – .08½
Knit, light hoods	.09½– .10½
Worsted, light	.03½– .04
Worsted, blue	.05 – .05½
Worsted, black	.05½– .06

Silk Yarns

THROWN SILK (60 day basis)
Prices Nominal

Japan organzine, 2 thd. spec. gd. XX sk 85%	$3.20
Japan organzine, 2 thd. grand sk. 83%	3.00
Japan organzine, 2 thd. sp. crack. sk. 81%	2.85
Japan crepe, 3 thd. gd. XX bob. 83%	3.00
Japan crepe, 3 thd. sp. crack. bob. 81%	2.90
Japan grenadine, 4 thd. sp. grand singles, 87%	4.05
Japan grenadine, 3 thd. 90%	5.05
Canton crepe, 3 and 4 thd. 14/16 on bobbins	2.15
Hosiery tram, 3 thd. Japan 90%	3.95
Hosiery tram 5 thd, Japan, 85%	3.00
Hosiery tram, crack XX 78%	2.70

SPUN SILK YARNS (Terms: net 30)

40/2	$3.10	60/2	$3.35
54/2	3.30	62/1	2.35

Raw Silk

(60 Day Terms. Spot Goods)
Prices Nominal

	13/15 White	20/22 White	20/22 Yellow
Super Grand, 87%	$2.50	$2.30	$2.35
Special Grand, 85%	2.30	2.20	2.25
Grand XX, 83%	2.15	2.10	2.15
Special Crack, 81%	2.00	2.10	2.15
Crack XX, 78%	1.90	2.05	2.10
Extra Extra, 73%	1.85	....	....
Best Extra, 68%	1.75	....	....

Canton filature, new style, 14/16	$1.75
Canton filature, new style, 20/22	1.70
Tussah filature, 8 cocoon	1.00

NATIONAL RAW SILK EXCHANGE

	Close Feb. 9	For the Week High	For the Week Low	Close Feb. 16	Net Ch'ge
February	1.62	1.72	1.62	1.72	+0.10
March	1.69	1.77	1.65	1.75	+0.06
April	1.74	1.80	1.67	1.75	+0.01
May	1.71	1.85	1.68	1.75	+0.04
June	1.72	1.85	1.68	1.75	+0.03
July	1.72	1.85	1.69	1.75	+0.03
August	1.72	1.83	1.69	1.75	+0.03
September	1.72	1.85	1.69	1.75	+0.03

Total number of bales, 3,900. Total approximate value, $959,595. Trading unit crack XX 13/15 white 78%.

Domestic Rayon

VISCOSE PROCESS

Denier	Filament	First	Second
30	8	$2.25	...
50	12–18	1.35	$1.25
75	18–30	1.20	1.10
100	18–40	1.00	.90
125	36–50	.90	.80
150	30	.72	.70
150	24–44	.75	.72
150	60	.85	.82
150	75–90	.85	.82
170	24–27	.75	.72
170	60	.85	.82
200	30–42	75	.72
300	42–62	.63	.60
450	42–72	.63	.60
600	72–96	.63	.60
900	100–144	.63	.60

NITRO-CELLULOSE PROCESS

Denier	First Qual.	Second Qual.	Denier	First Qual.	Second Qual.
75	$1.35	$1.25	150	$0.75	$0.72
100	1.05	.95	175	.75	.72
125	.95	85			

CUPRAMMONIUM PROCESS

Denier	Filament	Price	Denier	Filament	Price
15	24	$3.10	75	60	$1.30
25	24	2.85	80	60	1.30
30	24	2.60	100	75	1.10
40	30	1.70	120	90	1.00
52	30	1.50	150	112	.90
65	45	1.40	180	135	.87

ACETATE PROCESS

Denier	Price	Denier	Price
45	$1.60	125	$1.10
60	1.50	150	1.00
75	1.40	300	1.00
100	1.30		

Rayon Waste

Open bleached waste	$0.13–$0.14
Open bleached waste	.10½
Bleached thread waste (mfs.)	.09
Bleached thread waste (misc.)	.06– .07
Colored thread waste	.03– .04
Colored clips	.03– .04

CONVERTED RAYON WASTE

Bleached tops	$0.30–$0.32½
Unbleached tops	.27– .28
Bleached noils	.11
Unbleached noils	.09½
Bleached garnetts	.12
Unbleached garnetts	.13
Colored garnetts	.10– .11

Silk Waste

Kibizzo Kakai Grand XX	0.50
Kibizzo Kakai Triple Extra	.44
Frison Grand Double	.49
Pierced Cocoons	.50

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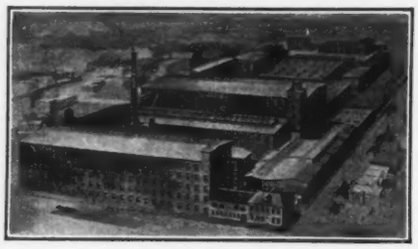

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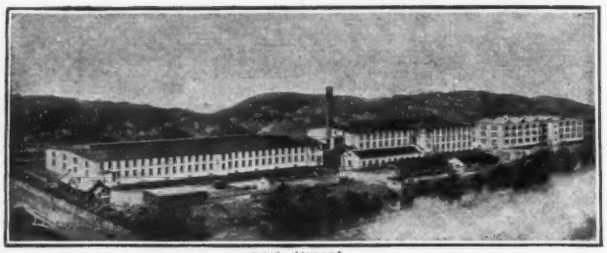

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